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Water Resources Data for Illinois

Volume 2. Illinois River Basin

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IL-79-2

WATER YEAR 1979

Prepared in cooperation with the State of Illinois and with other agencies

CALENDAR FOR WATER YEAR 1979

1978

OCTOBER

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1979

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Water Resources Data for Illinois

Volume 2. Illinois River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IL-79-2

WATER YEAR 1979

Prepared in cooperation with the State of Illinois and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For information on the water program in Illinois write to

District Chief, Water Resources Division
U.S. Geological Survey
605 N. Neil Street
P.O. Box 1026
Champaign, Illinois 61820

1980

PREFACE

This report was prepared by personnel of the Illinois district of the Water Resources Division of the U.S. Geological Survey under the supervision of Larry G. Toler, District Chief, and J. E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Illinois and other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist, U.S. Geological Survey, and S. L. Lang, Acting Assistant Chief Hydrologist for Scientific Publications and Data Management.

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Water resources data for the 1979 water year for Illinois consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 85 gaging stations; stage only at 2 gaging stations; stage only at 3 lake stations; water quality at 92 gaging stations and 25 wells; and water levels at 3 observation wells. Also included are data for 96 crest-stage partial-record stations and 42 flood-profile stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volume 1 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Illinois.

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[*Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation, stage, or contents*]

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WATER RESOURCES DATA FOR ILLINOIS, 1979

INTRODUCTION

Water resources data for the 1979 water year for Illinois consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 85 gaging stations; stage only at 2 gaging stations; stage only at 3 lake stations; water quality at 92 gaging stations and 25 wells; and water levels at 3 observation wells. Also included are data for 96 crest-stage partial-record stations and 42 flood-profile stations. Locations of these sites are shown on figures 3 and 4. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volume 1 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in Illinois.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IL-79-2." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (217) 398-5353.

COOPERATION

The U.S. Geological Survey and organizations of the State of Illinois have had cooperative agreements for the systematic collection of streamflow records since 1930, and for water-quality records since 1953. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Illinois Institute of Natural Resources, Frank H. Beal, director, through Water Survey Division, W. C. Ackermann, chief.

Illinois Department of Transportation, J. D. Kramer, secretary, through Division of Water Resources, F. L. Kudrna, director, and Division of Highways, H. W. Monroney, director.

Illinois Environmental Protection Agency, M. P. Mauzy, director.

Illinois Institute of Natural Resources, Frank H. Beal, director.

Bloomington and Normal Sanitary District, E. B. Mercier, trustee-president.

Forest Preserve District of Cook County, G. W. Dunne, president, Board of County Commissioners, A. L. Janura, superintendent.

Fountain Head Drainage District, R. H. Schultz, commissioner.

Sanitary District of Bloom Township, C. A. Lueeke, president, and J. L. Daugherty, manager.

The Metropolitan Sanitary District of Greater Chicago, N. J. Melas, president, and Hugh H. McMillan, superintendent.

Du Page County Highway Department, R. A. Dold, superintendent of highways.

Kane County Highway Department, P. B. Elfstrom, County Board chairman, and W. E. Carter, superintendent of highways.

McHenry County Regional Planning Commission, S. E. Aradas, director.

City of Springfield, J. Michael Houston, mayor, and Paul Bonansinga, commissioner.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 54 gaging stations, 17 water-quality stations, and for miscellaneous measurements published in this report, and by the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce.

Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

Streamflow varied from normal to below normal as the 1979 water year began. Isolated storms brought some medium stage rises in November and December. The winter months produced record amounts of snowfall that exceeded the previous year's record snowfall. Below normal temperatures were recorded from December through February. In March, snowmelt and storms produced some flooding in central and southern Illinois and severe flooding in parts of northern Illinois. Locally heavy rains caused medium and high stages in April, July, and August. Total streamflow for the year was generally above normal throughout the State.

Monthly and annual mean discharge is compared with medians at the three representative gaging stations in figure 2.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life process. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease. Others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/s, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to the amount of substance present in true chemical solution. In practice, however, the term includes all forms of substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram ($\mu g/g$) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, $\mu g/L$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) or water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 – 0.004	Sedimentation.
Silt	.004 – .062	Sedimentation.
Sand	.062 – 2.0	Sedimentation or sieve.
Gravel	2.0 – 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the same is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m^2 · time)] for periphyton and macrophytes and [mg C/(m^3 · time)] for phytoplankton are units expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/(m^2 · time)] for periphyton and macrophytes and [mg O_2/(m^3 · time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary productivity is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45 micrometer filter.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 03336900, which appears just to the left of the station name, includes the 2-digit part number "03" plus the 6-digit downstream order number "336900."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1 below.

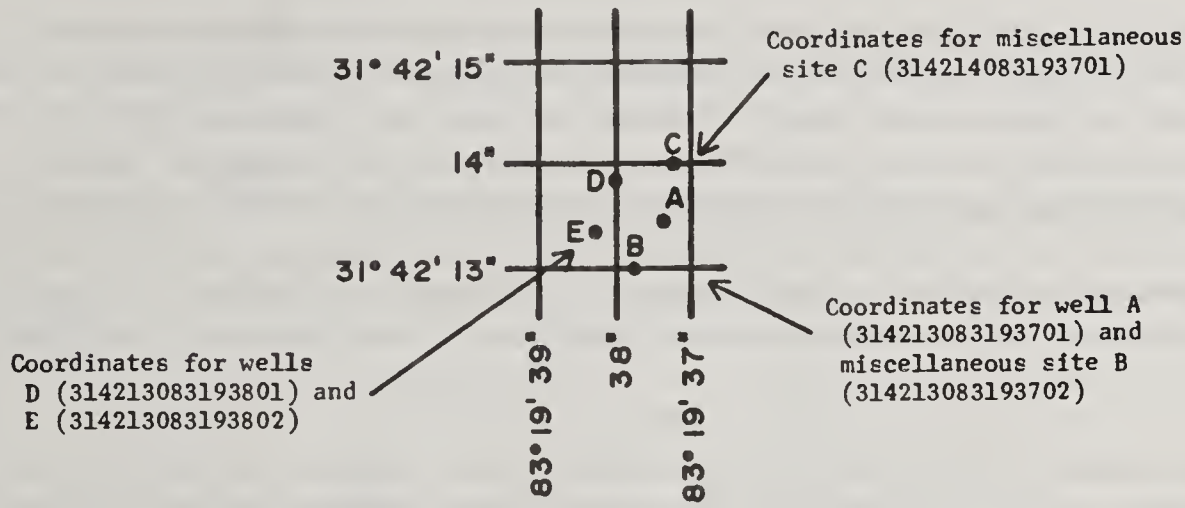


Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, types and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for most stations, is that published in "River Mileages and Drainage Areas for Illinois Streams." Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 6.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean

dischargcs is given for stream-gaging stations having 10 or more completc years of record if the medium differs from the average by more than 10 pcrcent. Under "EXTREMES" are given first, thc extremes for the period of record, sccond, information available outside the period of record, and last, thosc for the current year. Unlcss otherwisc qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a watcr-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given scparately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For somc stations peak discharges are listed with EXTREMES FOR CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the timc of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations arc published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives thc mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of thc daily figures. Thc line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inchcs are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, back-water from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site arc indicated only if they are a month or more in length and the accuracy of thc rccords is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of dischargc measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following thc tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation, or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measuremcnts of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair", within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (spccific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Several cooperating agencies have contributed to the water quality data included in this report. All these agencies have also participated in quality control and quality assurance programs designed to standardize collection and analysis procedures and to assure comparability of all data. Agency participation is identified in the tables for all water samples by the use of parameter codes. The following codes identify the agency having the principal responsibility for collecting and/or analyzing water samples.

Agency	Agency Code
Illinois Environmental Protection Agency	17002
Illinois State Water Survey	17003
Metropolitan Sanitary District of Greater Chicago	17001
U.S. Army, Corps of Engineers	00810
U.S. Geological Survey	80010 or 80020

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page. Other accepted procedures are included in the National Handbook of Recommended Methods for Water Data Acquisition, Standard Methods for the Analysis of Water and Wastewater, U.S. Geological Survey Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments, and the U.S. Environmental Protection Agency Methods for Chemical Analysis of Water and Wastes.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where temperature is recordcd on charts, maximum and minimum values are manually processed and at stations whcre temperature is recorded on tape, maximum, minimum, and mean values are machine processed for publication.

Sediment

Suspended-sediment concentrations are determincd from samples collected by using depth-integrating samplers. Samplcs usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily, or in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdividcd day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed matcrial are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of obscrvation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum of 1929 (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above NGVD is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute values of the total depth to water may be a few tenths of a foot, whereas the error in determining the net changes of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1–D1. *Water temperature–influential factors, field measurement, and data presentation,* by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS–TWRI Book 1, Chapter D1. 1975. 65 pages.

1–D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents,* by W. W. Wood: USGS–TWRI Book 1, Chapter D2. 1976. 24 pages.

2–D1. *Application of surface geophysics to ground-water investigations,* by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS–TWRI Book 2, Chapter D1. 1974. 116 pages.

2–E1. *Application of borehole geophysics to water-resources investigations,* by W. S. Keys and L. M. MacCary: USGS–TWRI Book 2, Chapter E1. 1971. 126 pages.

3–A1. *General field and office procedures for indirect discharge measurements,* by M. A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 pages.

3–A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M. A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 pages.

3–A3. *Measurement of peak discharge at culverts by indirect methods,* by G. L. Bodhaine: USGS–TWRI Book 3, Chapter A3. 1968. 60 pages.

3–A4. *Measurement of peak discharge at width contractions by indirect methods,* by H. F. Matthai: USGS–TWRI Book 3, Chapter A4. 1967. 44 pages.

3–A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI Book 3, Chapter A5. 1967. 29 pages.

3–A6. *General procedure for gaging streams,* by R. W. Carter and Jacob Davidian: USGS–TWRI Book 3, Chapter A6. 1968. 13 pages.

3–A7. *Stage measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS–TWRI Book 3, Chapter A7. 1968. 28 pages.

3–A8. *Discharge measurements at gaging stations,* by T. J. Buchanan and W. P. Somers: USGS–TWRI Book 3, Chapter A8. 1969. 65 pages.

3–A11. *Measurement of discharge by moving-boat method,* by G. F. Smoot and C. E. Novak: USGS–TWRI Book 3, Chapter A11. 1969. 22 pages.

3–B1. *Aquifer-test design, observation, and data analysis,* by R. W. Stallman: USGS–TWRI Book 3, Chapter B1. 1971. 26 pages.

3–B2. *Introduction to ground-water hydraulics, a programed test for self-instruction,* by G. D. Bennett: USGS–TWRI Book 3, Chapter B2. 1976. 172 pages.

3–C1. *Fluvial sediment concepts,* by H. P. Guy: USGS–TWRI Book 3, Chapter C1. 1970. 55 pages.

3–C2. *Field methods for measurement of fluvial sediment,* by H. P. Guy and V. W. Norman: USGS–TWRI Book 3, Chapter C2. 1970. 59 pages.

3–C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI Book 3, Chapter C3. 1972. 66 pages.

4–A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS–TWRI Book 4, Chapter A1. 1968. 39 pages.

4–A2. *Frequency curves*, by H. C. Riggs: USGS–TWRI Book 4, Chapter A2. 1968. 15 pages.

4–B1. *Low-flow investigations*, by H. C. Riggs: USGS–TWRI Book 4, Chapter B1. 1972. 18 pages.

4–B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS–TWRI Book 4, Chapter B2. 1973. 20 pages.

4–B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS–TWRI Book 4, Chapter B3. 1973. 15 pages.

4–D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS–TWRI Book 4, Chapter D1. 1970. 17 pages.

5–A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS–TWRI Book 5, Chapter A1. 1979. 626 pages.

5–A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS–TWRI Book 5, Chapter A2. 1971. 31 pages.

5–A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS–TWRI Book 5, Chapter A3. 1972. 40 pages.

5–A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS–TWRI Book 5, Chapter A4. 1977. 332 pages.

5–A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS–TWRI Book 5, Chapter A5. 1977. 95 pages.

5–C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS–TWRI Book 5, Chapter C1. 1969. 58 pages.

7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS–TWRI Book 7, Chapter C1. 1976. 116 pages.

7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS–TWRI Book 7, Chapter C2. 1978. 90 pages.

8–A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS–TWRI Book 8, Chapter A1. 1968. 23 pages.

8–B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS–TWRI Book 8, Chapter B2. 1968. 15 pages.

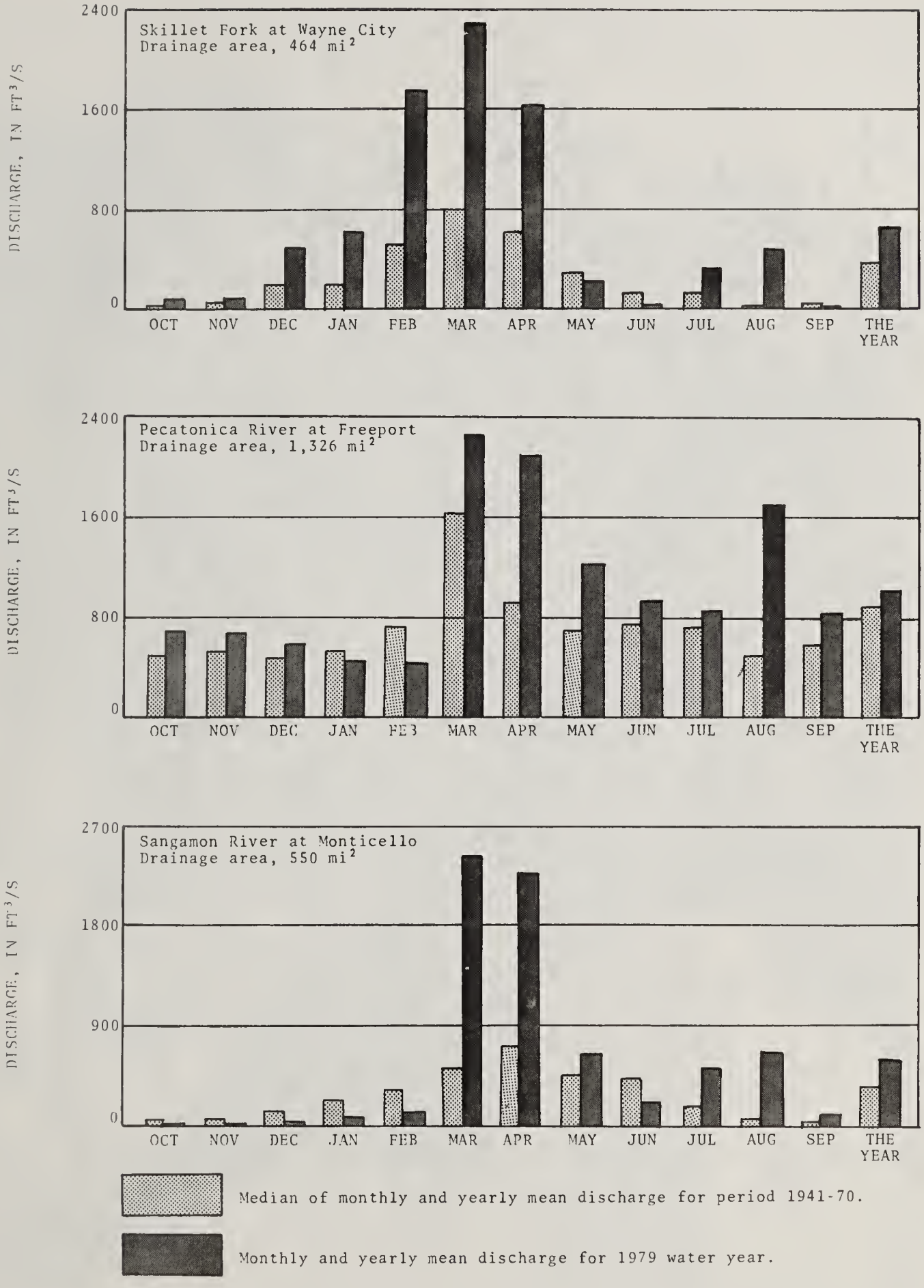
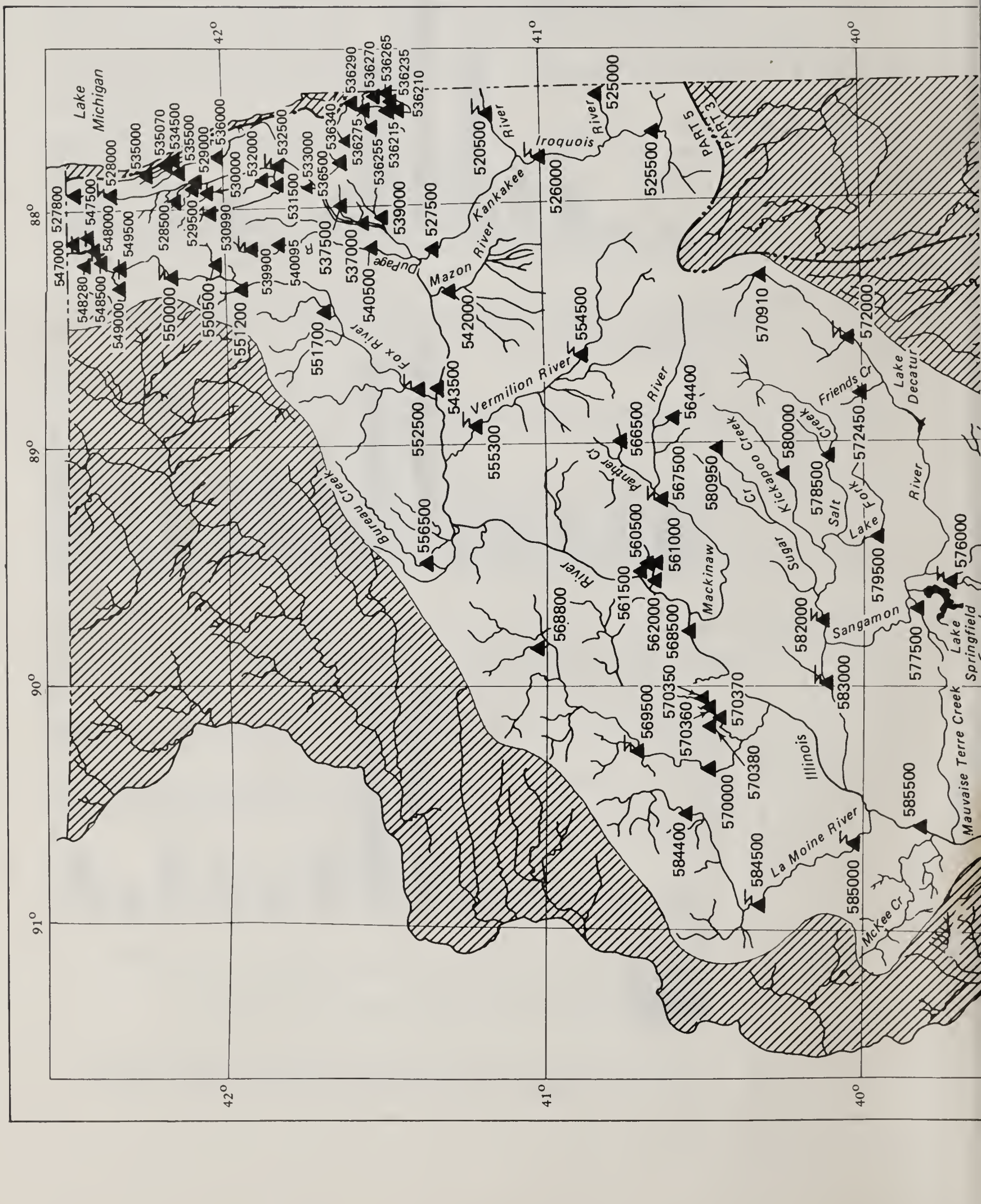


Figure 2.--Discharge during 1979 water year compared with median discharge for the period 1941-70 for three representative gaging stations.


Lake Michigan
Iroquois River
Kankakee River
Mazon River
DuPage R
Fox River
Vermilion River
Bureau Creek
Panther Cr
Mackinaw River
Kickapoo Creek
Sugar Cr
Salt Creek
Friends Cr
Lake Fork
Lake Decatur
Sangamon River
Lake Springfield
Mauvaise Terre Creek
Illinois
La Moine River
McKee Cr
PART 5
PART 3
42°
41°
40°
88°
89°
90°
91°

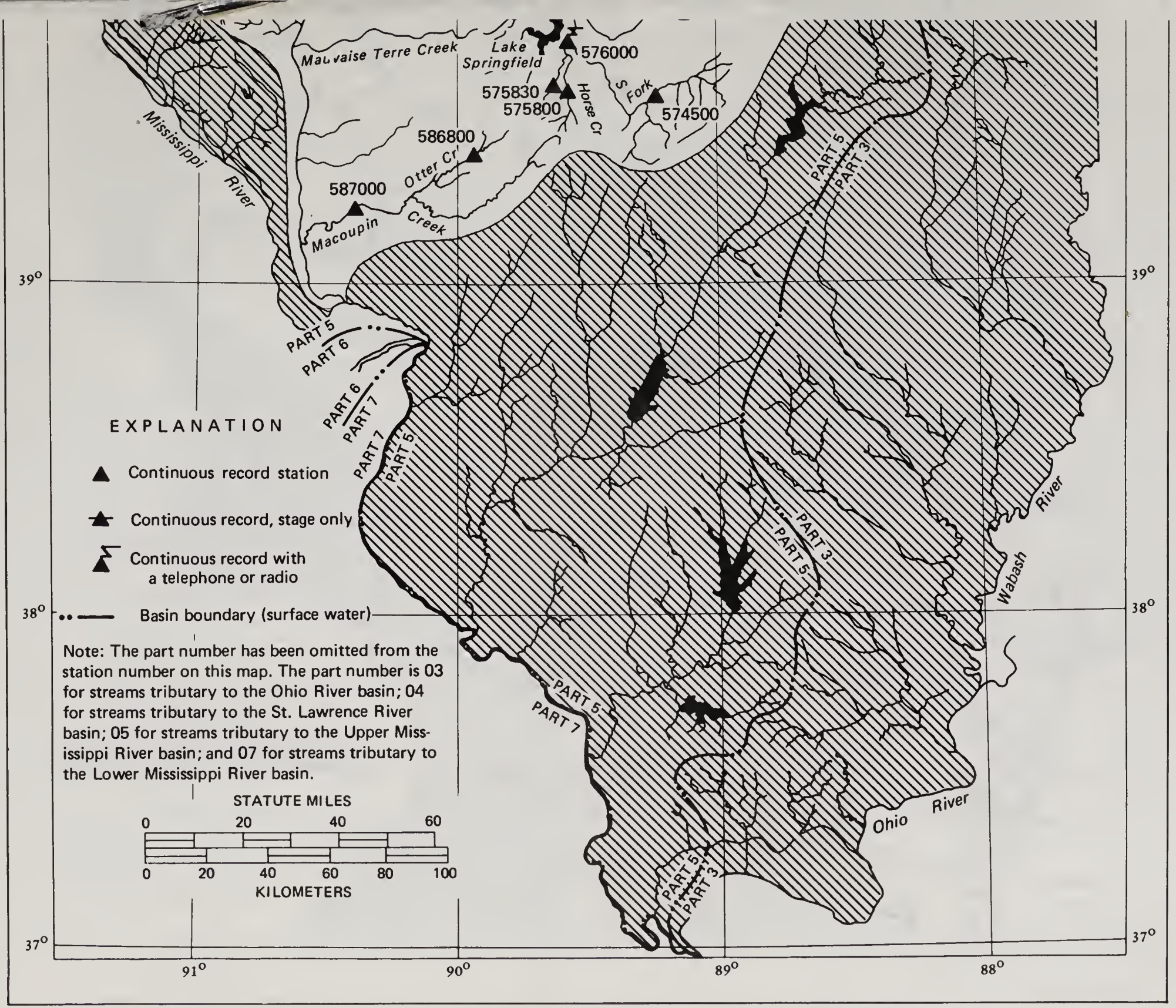
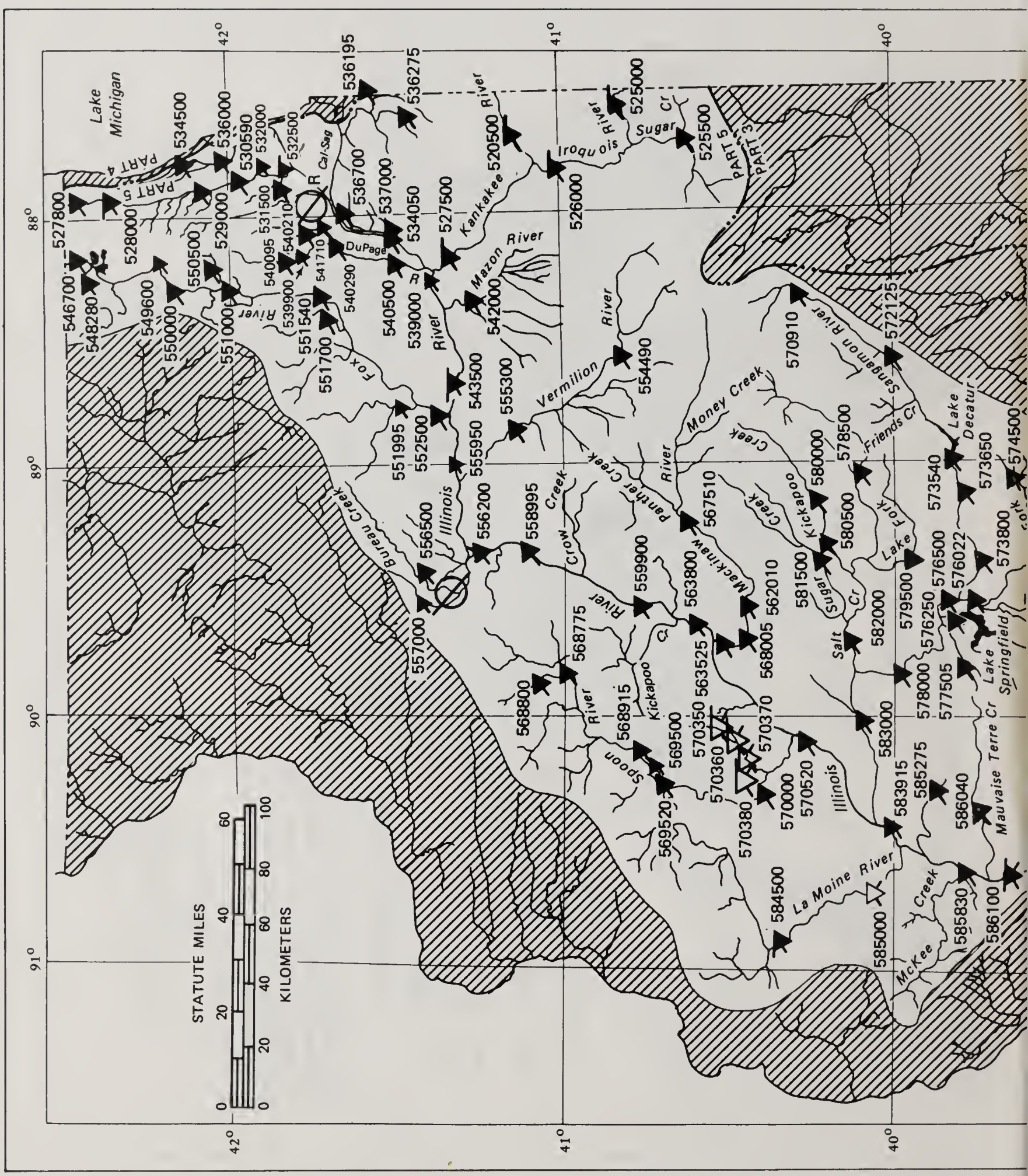


Figure 3. Map of Illinois showing location of active surface water gaging stations in the Illinois River basin


Lake Michigan
PART A
PART B
PART C
PART 5
PART 3
DuPage
Cal-Sag
Kankakee River
Iroquois River
Sugar Cr
Mazon River
Vermilion River
Fox River
Illinois River
Bureau Creek
Crow Creek
Panther Creek
Money Creek
Mackinaw River
Kickapoo Creek
Sangamon River
Friends Cr
Lake Decatur
Salt Cr
Spoon River
Lake Springfield
Mauvaise Terre Cr
La Moine River
McKee Creek
STATUTE MILES
KILOMETERS
0 20 40 60
0 20 40 60 80 100
88°
89°
90°
91°
42°
41°
40°

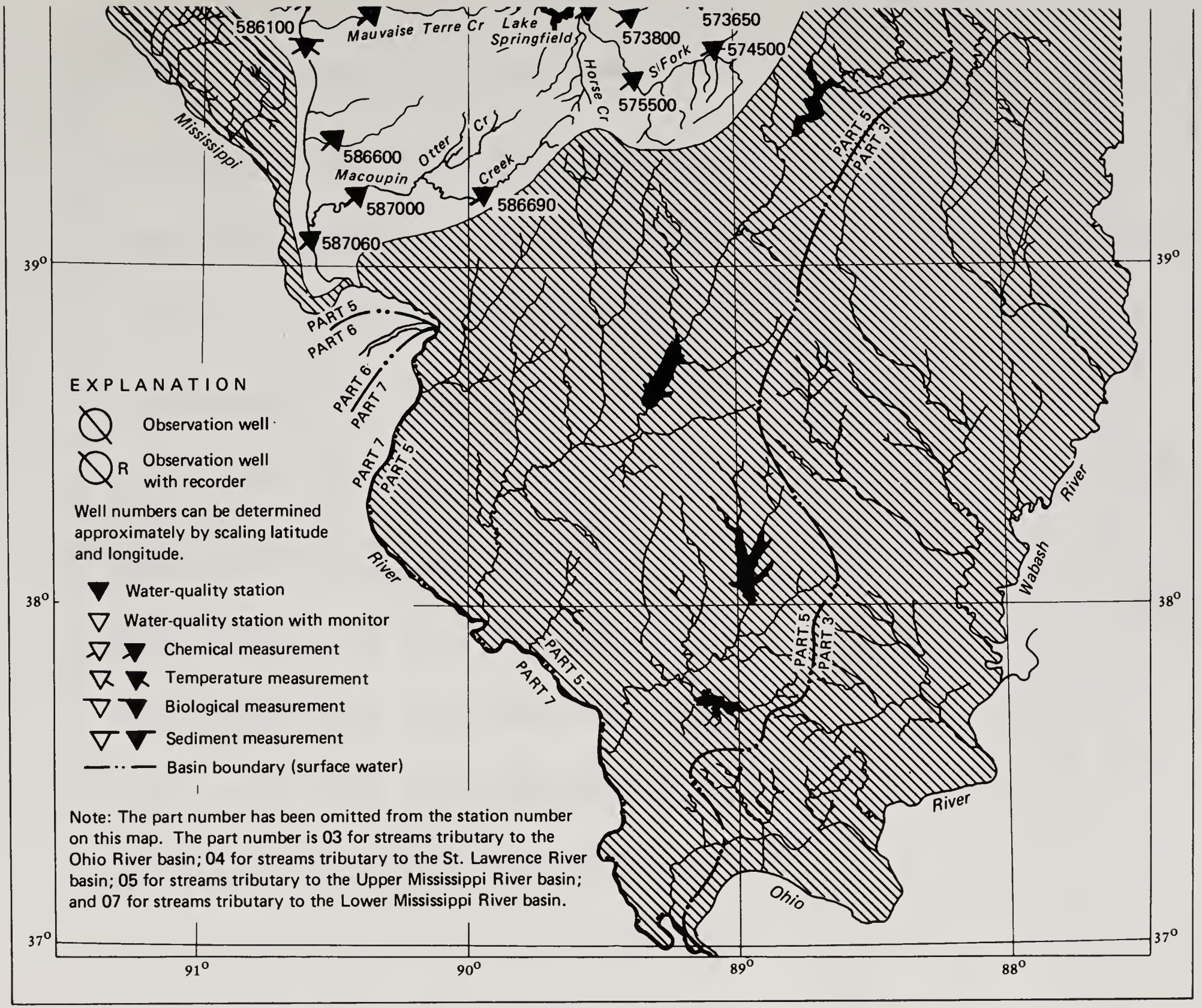


Figure 4. Map of Illinois showing location of water-quality stations and observation wells in the Illinois River basin

UPPER MISSISSIPPI RIVER BASIN

ILLINOIS RIVER BASIN

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in NE¼ sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at Hill Street in Momence, 0.2 mi (0.3 km) downstream from bridge on State Highways 1 and 17, 1.2 mi (1.9 km) upstream from Tower Creek, and at mile 47.9 (77.1 km).

DRAINAGE AREA.--2,294 mi^2 (5,941 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to December 1905, February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft (185.678 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.00 ft (0.305 m) higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--64 years (water years 1916-79), 1,928 ft^3/s (54.60 m^3/s), 11.41 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s (453 m^3/s) Mar. 6, 1979, gage height, 10.51 ft (3.203 m), ice jam; minimum observed, 306 ft^3/s (8.67 m^3/s) Sept. 1, 6, 17, 1919.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,000 ft^3/s (453 m^3/s) Mar. 6, gage height, 10.51 ft (3.203 m), ice jam; minimum, 601 ft^3/s (17.0 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	677	720	884	1700	950	2500	6220	5650	2500	1180	1020	1260
2	648	710	917	1450	950	3500	6130	5350	2450	1200	1030	1210
3	648	697	962	1300	950	4000	6110	5890	2380	1210	1050	1140
4	648	700	1020	1200	900	6000	5850	5980	2280	1210	1050	1080
5	648	687	1160	1100	900	9500	5650	5700	2200	1110	1020	1050
6	648	693	1210	1100	900	13400	5420	5460	2070	1060	1030	1030
7	648	712	1250	1050	900	14800	5210	5230	1940	1040	1090	1020
8	648	715	1220	1000	900	12000	5120	5000	1890	1010	1060	1000
9	648	706	1150	1000	900	10500	5140	4840	1860	951	1020	982
10	677	703	1100	1000	850	8130	5040	4680	1860	920	981	923
11	687	718	1150	1000	850	7690	5100	4500	1860	906	1010	884
12	648	721	1300	1000	850	7040	6930	4320	1830	879	1130	862
13	631	710	1500	1000	800	6980	6610	4150	1810	852	1140	842
14	629	689	1400	1000	800	7470	6070	3990	1730	833	1100	819
15	625	698	1300	1000	800	6840	5700	3880	1650	823	1020	801
16	635	716	1400	1000	800	6610	5400	3820	1580	814	960	783
17	655	727	1500	1000	800	6650	5190	3720	1500	793	918	760
18	687	744	1250	1000	800	6810	5020	3680	1460	768	1040	753
19	717	747	1150	1000	800	7520	4880	3570	1440	747	1260	736
20	727	762	1080	1000	830	7640	4760	3460	1450	730	1470	719
21	727	765	1060	1100	870	7070	4640	3350	1480	695	1590	707
22	697	820	1040	1200	900	6540	4480	3200	1470	676	1620	700
23	697	873	1030	1200	1000	6220	4280	3090	1400	657	1640	678
24	717	884	1030	1100	1300	6090	4240	2960	1340	648	1600	669
25	737	873	1030	1000	1500	6040	4600	2840	1280	727	1480	685
26	737	873	1000	950	1700	5700	5700	2750	1230	840	1390	689
27	717	884	900	950	2000	5420	6330	2680	1190	899	1310	650
28	721	884	757	950	2200	5290	6240	2640	1160	895	1240	624
29	732	852	707	950	---	5740	5980	2590	1130	840	1210	641
30	720	852	862	950	---	6950	5960	2560	1180	870	1240	618
31	713	---	1350	950	---	6680	---	2520	---	1030	1260	---
TOTAL	21094	22835	34669	33200	28700	223320	164000	124050	50600	27813	36979	25315
MEAN	680	761	1118	1071	1025	7204	5467	4002	1687	897	1193	844
MAX	737	884	1500	1700	2200	14800	6930	5980	2500	1210	1640	1260
MIN	625	687	707	950	800	2500	4240	2520	1130	648	918	618
CFSM	.30	.33	.49	.47	.45	3.14	2.38	1.75	.74	.39	.52	.37
IN.	.34	.37	.56	.54	.47	3.62	2.66	2.01	.82	.45	.60	.41

CAL YR 1978 TOTAL 686740 MEAN 1881 MAX 7410 MIN 478 CFSM .82 IN 11.14
WTR YR 1979 TOTAL 792575 MEAN 2171 MAX 14800 MIN 618 CFSM .95 IN 12.85

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year. Additional chemical data for water years 1959-72 are published in Water-Resources Investigations 78-23 and 79-24 as site F 02.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1978 to September 1979.

REMARKS.--Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 455 mg/L Mar. 7, 1979; minimum daily mean, 13 mg/L Dec. 1, 1978.
SEDIMENT LOADS: Maximum daily, 18,200 tons (16,500 metric tons) Mar. 7, 1979; minimum daily, 27 tons (24 metric tons) Sept. 28, 30, 1979.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 455 mg/L Mar. 7; minimum daily mean, 13 mg/L Dec. 1.
SEDIMENT LOADS: Maximum daily, 18,200 tons (16,500 metric tons) Mar. 7; minimum daily, 27 tons (24 metric tons) Sept. 28, 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
19...	0900	17002	17002	--	717	620	8.0	9.0	9.0	10.8	20
31...	1100	80010	--	--	723	--	--	20.0	11.0	--	--
NOV											
15...	1000	17002	17002	--	698	600	7.7	6.5	7.0	11.7	12
DEC											
14...	1700	80010	--	--	1370	--	--	1.0	.5	--	--
19...	1030	80010	--	--	1140	--	--	.5	1.0	--	--
28...	0800	17002	17002	--	884	730	8.1	-10.0	.0	13.8	12
28...	1000	17002	17002	--	873	740	8.1	-14.5	.0	13.8	8
FEB											
01...	1200	80010	--	--	948	--	--	--	.0	--	--
22...	1400	17002	17002	900	--	1800	7.1	3.5	.0	8.3	35
MAR											
09...	1415	80010	--	--	10200	--	--	3.0	1.5	--	--
28...	1000	17002	17002	--	5250	590	7.6	--	4.0	11.8	24
APR											
09...	0900	17002	17002	--	5170	539	7.9	4.0	4.5	11.2	16
09...	1000	17002	17002	--	5170	550	7.9	1.0	4.5	11.2	24
24...	1700	80010	--	--	4550	--	--	17.0	15.5	--	--
26...	0800	17002	17002	--	5210	530	7.6	9.5	14.0	9.4	28
MAY											
31...	1100	17002	17002	--	2560	--	--	24.0	18.5	--	20
JUN											
14...	1230	80010	--	--	1640	--	--	27.5	21.5	--	--
19...	1300	17002	17002	--	1440	--	8.1	28.0	18.5	--	20
JUL											
24...	1100	17002	17002	--	648	700	8.2	28.5	24.5	--	0
AUG											
20...	1500	80010	--	--	1470	--	--	29.0	23.0	--	--
22...	1300	17002	17002	--	1620	500	8.1	30.5	23.0	--	24
SEP											
18...	1400	17002	17002	--	753	350	8.4	24.5	21.0	12.6	8

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT										
19...	--	94	22	--	--	.60	.02	--	--	--
NOV										
15...	73	100	21	--	--	.40	.03	--	--	--
DEC										
28...	18	125	24	--	--	.80	.12	--	--	--
28...	140	125	24	--	--	.90	.13	--	--	--
FEB										
22...	--	120	400	11	--	1.6	.40	--	--	--
MAR										
28...	--	100	21	15	9	3.2	.07	--	--	--
APR										
09...	36	100	22	4	--	2.8	.04	--	--	--
09...	--	100	20	9	--	2.6	.03	--	--	--
26...	520	97	23	72	9	1.7	.07	--	--	--
MAY										
31...	--	105	20	31	10	.90	.04	--	--	--
JUN										
19...	--	105	20	30	1	.60	.07	--	--	--
JUL										
24...	--	105	21	19	12	.20	.00	--	--	--
AUG										
22...	--	100	22	43	9	1.0	.05	--	--	--
SEP										
18...	210	125	23	10	6	.70	.06	.54	.60	1.3

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
19...	--	0	0	0	0	10	.0	--	1
NOV									
15...	.06	0	0	0	0	0	--	.00	0
DEC									
28...	--	0	0	0	0	10	--	--	1
28...	--	0	0	0	0	10	--	--	1
FEB									
22...	--	0	0	0	20	10	.0	.00	0
MAR									
28...	--	0	0	0	0	40	.0	--	0
APR									
09...	--	0	0	0	0	0	.0	--	1
09...	--	0	0	0	0	0	.0	--	1
26...	--	0	0	0	0	0	.0	--	0
MAY									
31...	--	0	0	0	0	0	.0	.00	0
JUN									
19...	--	0	0	0	0	0	.0	--	0
JUL									
24...	--	2	0	0	0	0	.1	.00	1
AUG									
22...	--	4	0	0	10	0	.0	--	0
SEP									
18...	.07	1	0	0	0	0	.0	--	6

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	677	47	86	720	31	60	884	13	31
2	648	36	63	710	31	59	917	15	37
3	648	39	68	697	30	56	962	16	42
4	648	36	63	700	30	57	1020	16	44
5	648	32	56	687	30	56	1160	17	53
6	648	30	52	693	31	58	1210	18	59
7	648	29	51	712	23	44	1250	19	64
8	648	24	42	715	18	35	1220	19	63
9	648	23	40	706	17	32	1150	17	53
10	677	28	51	703	17	32	1100	20	59
11	687	27	50	718	17	33	1150	25	78
12	648	26	45	721	17	33	1300	29	102
13	631	23	39	710	19	36	1500	27	109
14	629	22	37	689	18	33	1400	25	94
15	625	22	37	698	17	32	1300	22	77
16	635	20	34	716	17	33	1400	22	83
17	655	18	32	727	18	35	1500	16	65
18	687	20	37	744	16	32	1250	16	54
19	717	31	60	747	15	30	1150	19	59
20	727	38	75	762	15	31	1080	20	58
21	727	40	79	765	16	33	1060	16	46
22	697	40	75	820	15	33	1040	16	45
23	697	38	72	873	15	35	1030	16	44
24	717	38	74	884	15	36	1030	17	47
25	737	36	72	873	16	38	1030	16	44
26	737	38	76	873	15	35	1000	18	49
27	717	36	70	884	15	36	900	18	44
28	721	36	70	884	16	38	757	18	37
29	732	35	69	852	16	37	707	20	38
30	720	35	68	852	15	35	862	22	51
31	713	34	65	---	---	---	1350	---	---
TOTAL	21094	---	1808	22835	---	1173	34669	---	1729
		JANUARY			FEBRUARY			MARCH	
1	1700	18	83	950	16	41	2500	28	189
2	1450	25	98	950	16	41	3500	60	567
3	1300	19	67	950	16	41	4000	80	864
4	1200	18	58	900	16	39	6000	120	1940
5	1100	18	53	900	16	39	9500	300	7690
6	1100	17	50	900	16	39	13400	415	15000
7	1050	17	48	900	16	39	14800	455	18200
8	1000	17	46	900	16	39	12000	280	9070
9	1000	16	43	900	16	39	10500	210	5950
10	1000	16	43	850	16	37	8130	180	3950
11	1000	16	43	850	16	37	7690	150	3110
12	1000	16	43	850	16	37	7040	120	2280
13	1000	16	43	800	16	35	6980	100	1880
14	1000	16	43	800	16	35	7470	75	1510
15	1000	16	43	800	16	35	6840	75	1390
16	1000	16	43	800	16	35	6610	75	1340
17	1000	16	43	800	16	35	6650	70	1260
18	1000	16	43	800	16	35	6810	70	1290
19	1000	16	43	800	16	35	7520	75	1520
20	1000	16	43	830	16	36	7640	80	1650
21	1100	16	48	870	16	38	7070	70	1340
22	1200	16	52	900	16	39	6540	65	1150
23	1200	16	52	1000	18	49	6220	50	840
24	1100	16	48	1300	18	63	6090	45	740
25	1000	16	43	1500	20	81	6040	45	734
26	950	16	41	1700	22	101	5700	35	539
27	950	16	41	2000	23	124	5420	35	512
28	950	16	41	2200	25	148	5290	35	500
29	950	16	41	---	---	---	5740	65	1010
30	950	16	41	---	---	---	6950	88	1650
31	950	16	41	---	---	---	6680	69	1240
TOTAL	33200	---	1508	28700	---	1392	223320	---	90905

05520500 KANKAKEE RIVER AT MOMENCE, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	6220	45	756	5650	30	458	2500	55	371
2	6130	45	745	5350	30	433	2450	48	318
3	6110	45	742	5890	120	1910	2380	50	321
4	5850	43	679	5980	45	727	2280	65	400
5	5650	42	641	5700	40	616	2200	65	386
6	5420	40	585	5460	25	369	2070	68	380
7	5210	38	535	5230	22	311	1940	73	382
8	5120	35	484	5000	20	270	1890	68	347
9	5140	30	416	4840	20	261	1860	69	347
10	5040	30	408	4680	18	227	1860	68	341
11	5100	32	441	4500	18	219	1860	70	352
12	6930	327	6120	4320	18	210	1830	70	346
13	6610	121	2160	4150	18	202	1810	73	357
14	6070	49	803	3990	18	194	1730	74	346
15	5700	50	769	3880	18	189	1650	76	339
16	5400	45	656	3820	18	186	1580	73	311
17	5190	35	490	3720	18	181	1500	74	300
18	5020	28	380	3680	18	179	1460	74	292
19	4880	27	356	3570	18	174	1440	75	292
20	4760	25	321	3460	17	159	1450	73	286
21	4640	25	313	3350	16	145	1480	73	292
22	4480	22	266	3200	15	130	1470	73	290
23	4280	20	231	3090	15	125	1400	70	265
24	4240	20	229	2960	18	144	1340	68	246
25	4600	30	373	2840	25	192	1280	65	225
26	5700	176	2710	2750	33	245	1230	63	209
27	6330	118	2020	2680	31	224	1190	63	202
28	6240	80	1350	2640	31	221	1160	62	194
29	5980	40	646	2590	32	224	1130	58	177
30	5960	48	772	2560	44	304	1180	58	185
31	---	---	---	2520	50	340	---	---	---
OTAL	164000	---	27397	124050	---	9769	50600	---	9099
		JULY			AUGUST			SEPTEMBER	
1	1180	58	185	1020	90	248	1260	57	194
2	1200	58	188	1030	75	209	1210	57	186
3	1210	58	189	1050	80	227	1140	57	175
4	1210	58	189	1050	80	227	1080	55	160
5	1110	55	165	1020	77	212	1050	52	147
6	1060	53	152	1030	76	211	1030	47	131
7	1040	53	149	1090	72	212	1020	47	129
8	1010	53	145	1060	68	195	1000	48	130
9	951	50	128	1020	69	190	982	46	122
10	920	47	117	981	67	177	923	39	97
11	906	43	105	1010	70	191	884	38	91
12	879	38	90	1130	95	290	862	37	86
13	852	33	76	1140	80	246	842	37	84
14	833	30	67	1100	70	208	819	34	75
15	823	30	67	1020	68	187	801	32	69
16	814	30	66	960	68	176	783	30	63
17	793	33	71	918	68	169	760	28	57
18	768	35	73	1040	67	188	753	22	45
19	747	35	71	1260	90	306	736	20	40
20	730	35	69	1470	80	318	719	19	37
21	695	34	64	1590	65	279	707	18	34
22	676	34	62	1620	65	284	700	18	34
23	657	34	60	1640	65	288	678	18	33
24	648	34	59	1600	64	276	669	18	33
25	727	34	67	1480	64	256	685	18	33
26	840	39	88	1390	63	236	689	17	32
27	899	42	102	1310	63	223	650	16	28
28	895	43	104	1240	61	204	624	16	27
29	840	46	104	1210	59	193	641	16	28
30	870	48	113	1240	58	194	618	16	27
31	1030	80	222	1260	57	194	---	---	---
TOTAL	27813	---	3407	36979	---	7014	25315	---	2427
YEAR	792575		157628						

05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE¼ sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft (152 m) upstream from Penn Central bridge, 4.5 mi (7.2 km) downstream from Indiana-Illinois State line, and at mile 50.4 (81.1 km).

DRAINAGE AREA.--686 mi^2 (1,777 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft (187.251 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Jan. 2 to Feb. 1, which are poor.

AVERAGE DISCHARGE.--35 years, 536 ft^3/s (15.18 m^3/s), 10.61 in/yr (269 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s (295 m^3/s) June 13, 1958, gage height, 26.31 ft (8.019 m); minimum, 5.2 ft^3/s (0.15 m^3/s) Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,910 ft^3/s (196 m^3/s) Mar. 5, gage height, 23.81 ft (7.257 m); minimum, 26 ft^3/s (0.74 m^3/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	36	49	180	59	500	2000	2300	276	178	196	203
2	27	35	49	130	59	1100	2020	2140	308	193	296	160
3	28	34	55	100	59	1600	1970	2070	317	170	362	133
4	30	35	67	80	59	4500	1840	2030	286	1080	284	115
5	30	36	70	70	57	6770	1680	1930	255	1920	206	100
6	31	35	80	67	55	6460	1510	1810	232	1550	227	89
7	32	36	77	65	53	6090	1330	1660	217	1060	203	77
8	32	39	85	65	50	5500	1150	1470	307	654	196	69
9	31	40	78	65	50	4890	1020	1250	569	1490	171	65
10	29	41	70	65	50	4330	993	1020	739	1960	157	61
11	28	40	77	65	50	3930	1060	825	684	1700	207	58
12	27	39	84	65	50	3370	2130	775	547	1210	216	55
13	29	39	97	65	50	2790	2720	828	466	734	179	55
14	32	39	90	65	50	2420	2990	878	596	546	137	53
15	31	40	85	66	50	2080	2970	1140	626	465	105	51
16	29	41	83	70	50	1750	2740	1230	534	396	84	49
17	28	44	81	70	50	1400	2410	1180	439	309	75	42
18	29	45	80	70	50	1150	2040	1030	371	234	150	42
19	28	47	76	67	50	1180	1650	844	371	191	434	42
20	28	51	77	65	55	1450	1310	689	396	162	762	39
21	29	49	76	65	65	1500	1010	589	447	139	802	37
22	31	45	75	65	90	1460	790	510	449	122	666	36
23	31	46	66	65	130	1370	673	455	367	105	530	38
24	29	47	65	65	175	1300	709	425	284	100	515	37
25	29	49	63	65	250	1330	1050	394	229	304	465	37
26	31	52	60	65	280	1330	1580	359	197	562	346	34
27	37	54	58	63	310	1270	2090	343	170	500	286	31
28	46	53	56	60	350	1200	2310	331	151	371	260	31
29	46	53	58	60	---	1470	2400	308	146	266	253	31
30	41	52	61	60	---	1680	2400	285	156	203	300	34
31	38	---	106	60	---	1880	---	271	---	185	266	---
TOTAL	975	1292	2254	2248	2706	79050	52545	31369	11132	19059	9336	1904
MEAN	31.5	43.1	72.7	72.5	96.6	2550	1752	1012	371	615	301	63.5
MAX	46	54	106	180	350	6770	2990	2300	739	1960	802	203
MIN	27	34	49	60	50	500	673	271	146	100	75	31
CFSM	.05	.06	.11	.11	.14	3.72	2.55	1.48	.54	.90	.44	.09
IN.	.05	.07	.12	.12	.15	4.29	2.85	1.70	.60	1.03	.51	.10

CAL YR 1978 TOTAL 170760 MEAN 468 MAX 4270 MIN 26 CFSM .68 IN 9.26
WTR YR 1979 TOTAL 213870 MEAN 586 MAX 6770 MIN 27 CFSM .85 IN 11.60

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site FL 04.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1978 to September 1979.

REMARKS.--Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,010 mg/L July 9, 1979; minimum daily mean, 20 mg/L Jan. 5 to Feb. 20, 1979.
SEDIMENT LOADS: Maximum daily, 6,980 tons (6,330 metric tons) Mar. 6, 1979; minimum daily, 0.45 ton (0.41 metric ton) Dec. 28, 1978.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,010 mg/L July 9; minimum daily mean, 20 mg/L Jan. 5 to Feb. 20.
SEDIMENT LOADS: Maximum daily, 6,980 tons (6,330 metric tons) Mar. 6; minimum daily, 0.45 ton (0.41 metric ton) Dec. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
11...	1000	17002	17002	--	29	700	7.9	16.0	13.5	--	21
26...	1630	80010	--	--	32	--	--	7.0	10.5	--	--
NOV											
15...	1100	17002	17002	--	40	740	8.1	7.0	5.5	--	21
DEC											
06...	1400	17002	17002	80	--	720	8.2	-1.5	1.5	--	17
20...	1215	80010	--	--	76	--	--	10.5	4.5	--	--
JAN											
10...	1100	17002	17002	65	--	830	8.0	-14.5	1.0	7.4	20
FEB											
02...	1200	80010	--	--	59	--	--	-7.0	.0	--	--
05...	1300	17002	17002	57	--	310	7.9	-16.5	.5	4.4	15
MAR											
06...	1200	17002	17002	6460	--	320	8.5	6.5	1.0	12.5	44
08...	1500	80010	--	--	5620	--	--	8.0	1.0	--	--
APR											
02...	1200	17002	17002	2020	--	600	8.1	4.5	6.0	--	20
MAY											
01...	1000	17002	17002	--	2310	600	7.9	12.0	12.0	10.4	19
02...	1630	80010	--	--	2180	--	--	21.5	12.5	--	--
31...	1000	17002	17002	--	271	670	--	23.5	20.0	6.2	18
31...	1100	17002	17002	--	271	670	--	23.5	20.0	--	19
JUN											
20...	1345	80010	--	--	389	--	--	29.5	22.0	--	--
JUL											
05...	1200	17002	17002	--	1950	400	7.8	30.0	19.0	--	42
05...	1300	17002	17002	--	1940	400	7.9	30.0	19.0	--	37
31...	1100	17002	17002	--	186	620	7.2	26.0	24.5	--	27
AUG											
15...	1445	80010	--	--	101	--	--	21.0	20.5	--	--
SEP											
06...	1100	17002	17002	--	90	630	7.4	24.5	23.5	--	17

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT											
11...	--	--	68	7	.40	<.10	--	.90	1.3	--	--
NOV											
15...	--	--	26	8	.00	.00	.80	.80	.80	10	--
DEC											
06...	--	35	6	2	1.4	1.2	.60	1.8	3.2	0	--
JAN											
10...	--	40	4	1	5.3	.70	1.1	1.8	7.1	0	--
FEB											
05...	--	32	3	0	1.3	.80	--	--	--	0	--
MAR											
06...	--	7.0	187	32	7.3	.30	--	--	--	0	--
APR											
02...	--	33	45	7	11	.10	--	--	--	0	--
MAY											
01...	500	30	23	1	11	.00	--	--	--	0	--
31...	K140	--	70	10	6.0	.10	--	--	--	0	--
31...	K150	--	73	11	5.9	.10	--	--	--	0	--
JUL											
05...	--	--	242	36	9.5	.10	--	--	--	0	--
05...	--	--	242	34	9.7	.10	--	--	--	0	--
31...	--	--	110	12	4.9	.00	--	--	--	0	0
SEP											
06...	270	--	68	7	2.9	.00	--	--	--	0	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	28	100	7.6	36	41	4.0	49	7	.93
2	27	100	7.3	35	46	4.3	49	6	.79
3	28	95	7.2	34	43	3.9	55	7	1.0
4	30	95	7.7	35	53	5.0	67	10	1.8
5	30	93	7.5	36	50	4.9	70	12	2.3
6	31	80	6.7	35	56	5.3	80	13	2.8
7	32	66	5.7	36	51	5.0	77	16	3.3
8	32	60	5.2	39	44	4.6	85	18	4.1
9	31	58	4.9	40	25	2.7	78	16	3.4
10	29	53	4.1	41	21	2.3	70	12	2.3
11	28	51	3.9	40	22	2.4	77	14	2.9
12	27	50	3.6	39	25	2.6	84	10	2.3
13	29	52	4.1	39	27	2.8	97	10	2.6
14	32	65	5.6	39	25	2.6	90	6	1.5
15	31	60	5.0	40	24	2.6	85	8	1.8
16	29	55	4.3	41	27	3.0	83	6	1.3
17	28	44	3.3	44	23	2.7	81	9	2.0
18	29	50	3.9	45	17	2.1	80	10	2.2
19	28	49	3.7	47	15	1.9	76	10	2.1
20	28	48	3.6	51	13	1.8	77	8	1.7
21	29	50	3.9	49	11	1.5	76	5	1.0
22	31	52	4.4	45	8	.97	75	4	.81
23	31	51	4.3	46	8	.99	66	3	.53
24	29	45	3.5	47	8	1.0	65	3	.53
25	29	44	3.4	49	6	.79	63	10	1.7
26	31	41	3.4	52	8	1.1	60	8	1.3
27	37	46	4.6	54	9	1.3	58	3	.47
28	46	48	6.0	53	8	1.1	56	3	.45
29	46	46	5.7	53	7	1.0	58	3	.47
30	41	44	4.9	52	6	.84	61	3	.49
31	38	43	4.4	---	---	---	106	3	.86
TOTAL	975	---	153.4	1292	---	77.09	2254	---	51.73

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	180	24	12	59	20	3.2	500	40	54
2	130	24	8.4	59	20	3.2	1100	43	128
3	100	24	6.5	59	20	3.2	1600	58	251
4	80	24	5.2	59	20	3.2	4500	145	1760
5	70	20	3.8	57	20	3.1	6770	250	4570
6	67	20	3.6	55	20	3.0	6460	400	6980
7	65	20	3.5	53	20	2.9	6090	360	5920
8	65	20	3.5	50	20	2.7	5500	300	4450
9	65	20	3.5	50	20	2.7	4890	75	990
10	65	20	3.5	50	20	2.7	4330	75	877
11	65	20	3.5	50	20	2.7	3930	60	637
12	65	20	3.5	50	20	2.7	3370	40	364
13	65	20	3.5	50	20	2.7	2790	35	264
14	65	20	3.5	50	20	2.7	2420	35	229
15	66	20	3.6	50	20	2.7	2080	30	168
16	70	20	3.8	50	20	2.7	1750	30	142
17	70	20	3.8	50	20	2.7	1400	26	98
18	70	20	3.8	50	20	2.7	1150	26	81
19	67	20	3.6	50	20	2.7	1180	64	204
20	65	20	3.5	55	20	3.0	1450	53	207
21	65	20	3.5	65	23	4.0	1500	40	162
22	65	20	3.5	90	28	6.8	1460	30	118
23	65	20	3.5	130	36	13	1370	35	129
24	65	20	3.5	175	38	18	1300	45	158
25	65	20	3.5	250	43	29	1330	45	162
26	65	20	3.5	280	36	27	1330	33	119
27	63	20	3.4	310	38	32	1270	22	75
28	60	20	3.2	350	37	35	1200	35	113
29	60	20	3.2	---	---	---	1470	309	1230
30	60	20	3.2	---	---	---	1680	206	934
31	60	20	3.2	---	---	---	1880	147	746
TOTAL	2248	---	126.8	2706	---	222.0	79050	---	32320
		APRIL			MAY			JUNE	
1	2000	100	540	2300	45	279	276	115	86
2	2020	70	382	2140	43	248	308	160	133
3	1970	37	197	2070	55	307	317	157	134
4	1840	35	174	2030	60	329	286	125	97
5	1680	33	150	1930	65	339	255	120	83
6	1510	31	126	1810	70	342	232	115	72
7	1330	29	104	1660	75	336	217	110	64
8	1150	28	87	1470	80	318	307	333	276
9	1020	30	83	1250	80	270	569	996	1530
10	993	33	88	1020	90	248	739	441	880
11	1060	175	501	825	125	278	684	300	554
12	2130	643	3700	775	145	303	547	210	310
13	2720	303	2230	828	158	353	466	190	239
14	2990	212	1710	878	142	337	596	200	322
15	2970	88	706	1140	478	1470	626	194	328
16	2740	97	718	1230	203	674	534	210	303
17	2410	105	683	1180	145	462	439	210	249
18	2040	98	540	1030	127	353	371	205	205
19	1650	97	432	844	125	285	371	205	205
20	1310	105	371	689	140	260	396	205	219
21	1010	125	341	589	135	215	447	220	266
22	790	135	288	510	125	172	449	230	279
23	673	140	254	455	125	154	367	225	223
24	709	157	301	425	120	138	284	195	150
25	1050	497	1410	394	108	115	229	195	121
26	1580	406	1730	359	105	102	197	180	96
27	2090	183	1030	343	105	97	170	170	78
28	2310	95	593	331	105	94	151	185	75
29	2400	60	389	308	106	88	146	185	73
30	2400	50	324	285	108	83	156	220	93
31	---	---	---	271	115	84	---	---	---
TOTAL	52545	---	20182	31369	---	9133	11132	---	7743

05525000 IROQUOIS RIVER AT IROQUOIS, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	178	180	87	196	166	88	203	120	66
2	193	200	104	296	195	156	160	120	52
3	170	190	87	362	145	142	133	125	45
4	1080	974	2840	284	175	134	115	130	40
5	1920	286	1480	206	175	97	100	125	34
6	1550	200	837	227	180	110	89	125	30
7	1060	175	501	203	180	99	77	125	26
8	654	224	396	196	160	85	69	123	23
9	1490	1010	4060	171	175	81	65	105	18
10	1960	429	2270	157	175	74	61	110	18
11	1700	210	964	207	195	109	58	115	18
12	1210	180	588	216	180	105	55	125	19
13	734	180	357	179	170	82	55	125	19
14	546	185	273	137	170	63	53	130	19
15	465	185	232	105	170	48	51	110	15
16	396	200	214	84	145	33	49	110	15
17	309	195	163	75	140	28	42	115	13
18	234	195	123	150	175	71	42	105	12
19	191	185	95	434	300	352	42	110	12
20	162	190	83	762	410	844	39	105	11
21	139	160	60	802	275	595	37	105	10
22	122	195	64	666	220	396	36	95	9.2
23	105	190	54	530	175	250	38	90	9.2
24	100	190	51	515	180	250	37	90	9.0
25	304	330	271	465	175	220	37	85	8.5
26	562	250	379	346	165	154	34	95	8.7
27	500	180	243	286	155	120	31	94	7.9
28	371	170	170	260	145	102	31	100	8.4
29	266	165	119	253	140	96	31	115	9.6
30	203	160	88	300	135	109	34	120	11
31	185	170	85	266	130	93	---	---	---
TOTAL	19059	---	17338	9336	---	5186	1904	---	596.5
YEAR	213870		93129.52						

05525500 SUGAR CREEK AT MILFORD, IL

LOCATION.--Lat 40°37'50", long 87°43'25", in N½ sec.16, T.25 N., R.12 W., Iroquois County, Hydrologic Unit 07120002, on right bank at downstream side of highway bridge, 200 ft (61 m) downstream from Mud Creek, 1 mi (2 km) west of Milford, and at mile 23.9 (38.5 km).

DRAINAGE AREA.--446 mi^2 (1,155 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft (189.586 m) National Geodetic Vertical Datum of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Jan. 3 to Mar. 3, which are poor.

AVERAGE DISCHARGE.--31 years, 351 ft^3/s (9.940 m^3/s), 10.69 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft^3/s (649 m^3/s) Feb. 21, 1951, gage height, 20.90 ft (6.370 m), from rating curve extended above 8,200 ft^3/s (232 m^3/s); maximum gage height, 23.74 ft (7.236 m) Feb. 10, 1959, ice jam; minimum discharge, 2.0 ft^3/s (0.057 m^3/s) Sept. 1, 2, 7, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (71 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	0030	*12000	340	[a]*23.33	7.111	Apr. 27	0815	3030	85.8	14.82	4.517
Mar. 29	2015	3590	102	15.58	4.749	July 5	1215	3000	85.0	14.78	4.505
Apr. 12	1900	6520	185	18.60	5.669	Aug. 20	2400	2520	71.4	13.58	4.139

[a]ice jam

Minimum discharge, 9.0 ft^3/s (0.25 m^3/s) Oct. 1, 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	15	23	120	25	350	2250	1300	172	122	162	172
2	9.1	15	21	80	25	700	1760	1040	155	90	878	144
3	12	17	36	60	25	1600	1490	1140	134	72	788	124
4	13	18	66	45	25	6000	1280	1380	124	1120	375	106
5	12	17	46	35	25	10000	1260	1170	110	2800	194	93
6	11	19	36	32	25	4400	1170	943	112	1480	223	83
7	10	18	33	30	24	2600	902	754	107	633	177	72
8	9.9	19	40	30	23	2000	792	615	1550	404	116	62
9	9.7	19	35	30	22	1800	906	505	1600	812	93	56
10	11	18	30	30	22	1650	869	432	626	459	80	53
11	12	17	35	30	22	1350	1240	394	422	258	76	46
12	13	17	40	30	22	1000	5230	358	275	196	66	44
13	12	19	43	30	22	784	5590	336	217	217	56	40
14	13	24	38	30	22	1010	3760	326	205	410	50	36
15	12	24	42	30	22	844	2540	530	170	1580	46	35
16	12	23	38	30	22	639	1800	584	147	1270	39	32
17	12	27	33	29	22	528	1290	440	134	782	39	30
18	12	31	33	29	22	532	969	371	122	412	93	29
19	13	26	32	29	22	1020	771	330	136	243	588	27
20	14	21	32	29	25	1790	642	288	124	174	2090	25
21	13	19	31	29	30	1730	541	243	131	139	2440	24
22	13	17	28	29	40	1380	455	206	124	119	2050	22
23	13	22	29	29	60	1070	400	196	103	100	1470	20
24	11	28	30	28	80	1080	630	182	91	93	1980	19
25	14	26	28	28	120	1340	1580	167	80	124	1990	17
26	19	24	25	27	140	1180	2290	155	78	342	1230	17
27	22	26	16	25	150	889	2940	155	79	394	668	17
28	18	27	25	25	200	1130	2590	133	67	244	426	18
29	15	25	24	25	---	2960	2070	128	79	157	515	17
30	16	25	28	25	---	3270	1630	129	136	118	352	15
31	15	---	48	25	---	2730	---	122	---	133	226	---
TOTAL	400.9	643	1044	1083	1284	59356	51637	15052	7610	15497	19576	1495
MEAN	12.9	21.4	33.7	34.9	45.9	1915	1721	486	254	500	631	49.8
MAX	22	31	66	120	200	10000	5590	1380	1600	2800	2440	172
MIN	9.1	15	16	25	22	350	400	122	67	72	39	15
CFSM	.03	.05	.08	.08	.10	4.29	3.86	1.09	.57	1.12	1.42	.11
IN.	.03	.05	.09	.09	.11	4.95	4.31	1.26	.63	1.29	1.63	.12

CAL YR 1978 TOTAL 80371.0 MEAN 220 MAX 3090 MIN 6.0 CFSM .49 IN 6.70
WTR YR 1979 TOTAL 174677.9 MEAN 479 MAX 10000 MIN 9.1 CFSM 1.07 IN 14.57

05525500 SUGAR CREEK AT MILFORD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
11...	1200	17002	17002	11	750	7.8	15.5	14.5	--	15	--
24...	1245	80010	--	10	--	--	13.0	10.0	--	--	--
NOV											
15...	1200	17002	17002	24	790	8.0	4.5	7.0	--	11	--
DEC											
06...	1500	17002	17002	36	775	8.3	-2.0	1.0	--	24	--
14...	1040	80010	--	48	--	--	2.0	.5	--	--	--
JAN											
10...	1200	17002	17002	30	870	8.6	-13.5	.0	19.8	27	--
22...	1215	80010	--	29	--	--	-6.0	.0	--	--	--
22...	1245	80010	--	29	--	--	-6.0	.0	--	--	--
FEB											
05...	1500	17002	17002	25	360	8.4	-16.5	.5	8.9	31	--
MAR											
06...	1600	17002	17002	4400	520	8.5	9.0	2.0	13.4	48	--
07...	1545	80010	--	2450	--	--	9.0	3.5	--	--	--
APR											
02...	1400	17002	17002	1760	540	8.5	3.5	5.5	--	17	--
27...	1250	80010	--	2990	--	--	6.0	9.5	--	--	--
MAY											
01...	1200	17002	17002	1300	590	8.1	14.5	12.0	10.6	13	2000
31...	1200	17002	17002	122	665	--	22.0	20.5	6.5	14	19700
31...	1300	17002	17002	122	665	--	22.0	20.5	--	14	--
JUN											
05...	1630	80010	--	116	--	--	29.5	21.5	--	--	--
JUL											
05...	1400	17002	17002	2980	260	7.7	23.5	20.0	--	62	--
05...	1500	17002	17002	2970	260	7.7	23.5	20.0	--	62	--
AUG											
01...	1100	17002	17002	154	590	7.6	19.5	23.0	6.9	22	K20700
15...	1125	80010	--	46	--	--	18.0	19.0	--	--	--
SEP											
06...	1300	17002	17002	79	720	7.4	24.5	23.5	--	9	7700
11...	1315	80010	--	46	--	--	29.0	23.0	--	--	--

K Results based on colony count outside the acceptable rnage (non-ideal colony count).

05525500 SUGAR CREEK AT MILFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT										
11...	--	25	5	.60	.30	.50	.80	1.4	--	--
NOV										
15...	--	12	3	.20	.10	.50	.60	.80	10	--
DEC										
06...	44	17	7	3.7	.30	.60	.90	4.6	0	--
JAN										
10...	33	177	18	4.8	.30	1.5	1.8	6.6	0	--
FEB										
05...	28	153	13	2.0	.50	--	--	--	0	--
MAR										
06...	10	274	34	4.4	.20	--	--	--	20	--
APR										
02...	24	82	7	13	.10	--	--	--	0	--
MAY										
01...	24	65	4	11	.00	--	--	--	0	--
31...	--	53	5	7.9	.10	--	--	--	0	--
31...	--	59	7	7.8	.10	--	--	--	10	--
JUL										
05...	--	448	68	6.1	.00	--	--	--	0	--
05...	--	388	48	6.1	.00	--	--	--	0	--
AUG										
01...	--	153	12	4.9	.10	--	--	--	10	0
SEP										
06...	--	38	4	4.8	.10	--	--	--	10	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL

LOCATION.--Lat 41°00'32", long 87°49'22", in SW¼ sec.10, T.29 N., R.13 W., Kankakee County, Hydrologic Unit 07120002, 140 ft (43 m) from right bank on outside face of concrete guard rail on upstream side of highway bridge, 3.1 mi (5.0 km) downstream from Beaver Creek, 4.5 mi (7.2 km) east of Chebanse, and at mile 6.5 (10.5 km).

DRAINAGE AREA.--2,091 mi^2 (5,416 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1923 to current year.

REVISED RECORDS.--WSP 1308: 1924-28(M), 1930(M), 1936(M), 1938(M), 1942(M), 1947(M). WDR IL-75: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 597.99 ft (182.267 m) National Geodetic Vertical Datum of 1929. June 17, 1976, to Aug. 13, 1979, water-stage recorder, and April 1923 to June 16, 1976, nonrecording gage at site 600 ft (183 m) upstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--56 years, 1,607 ft^3/s (45.51 m^3/s), 10.44 in/yr (265 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft^3/s (765 m^3/s) May 13, 1933, Mar. 7, 1979; maximum gage height, 19.68 ft (5.998 m) Mar. 7, 1979, ice jam; minimum discharge, 9 ft^3/s (0.25 m^3/s) Oct. 6-8, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in spring of 1913 reached a stage of 19.6 ft (5.97 m), discharge, about 34,000 ft^3/s (963 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,000 ft^3/s (765 m^3/s) Mar. 7; maximum gage height, 19.68 ft (5.998 m) Mar. 7, ice jam; minimum discharge, 53 ft^3/s (1.50 m^3/s) Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	112	168	500	180	1300	8630	8160	646	527	778	917
2	86	112	158	450	180	3000	8290	6670	638	516	674	743
3	81	109	193	350	180	4500	7630	6900	652	486	991	618
4	82	105	241	300	180	10000	6530	7650	657	2140	1370	510
5	91	104	252	250	160	20000	5740	7050	605	5610	1070	416
6	88	85	259	220	150	25000	5150	6090	572	6410	825	377
7	84	103	279	210	150	27000	4500	4980	534	5090	725	345
8	85	112	330	200	150	25000	3700	4060	584	3130	651	299
9	93	110	300	200	150	20900	3490	3340	2620	2100	548	273
10	85	105	270	200	150	16500	3220	2810	3290	2800	465	243
11	82	95	300	200	150	12900	3350	2360	2470	3100	435	226
12	77	100	320	200	150	10400	8890	2010	1870	2680	494	187
13	86	114	370	200	150	8510	12000	1820	1670	2030	455	187
14	88	97	460	200	150	7710	13300	1780	1860	1450	406	170
15	95	94	380	200	150	6490	13400	1820	1700	1240	349	157
16	74	97	350	230	150	5450	11400	2230	1490	2180	308	157
17	91	119	380	230	150	4600	9110	2370	1210	2410	264	137
18	88	117	330	230	150	4110	6690	2260	1040	1880	368	133
19	83	111	304	200	150	5290	4770	2150	1060	1170	1060	121
20	79	113	295	200	200	7400	3640	1730	982	802	5000	117
21	83	120	300	200	250	7690	2900	1460	963	623	7500	114
22	77	123	290	200	350	7040	2340	1290	969	496	7090	106
23	62	139	280	200	500	6150	1970	1110	888	414	6500	102
24	82	143	250	200	600	5430	1910	1000	777	360	6020	106
25	87	145	270	200	800	5200	3930	928	648	460	5510	102
26	85	145	280	200	950	4980	7730	879	547	1350	4710	96
27	101	149	270	180	1050	4520	10000	806	469	2150	3520	96
28	95	160	250	180	1200	4110	10300	762	423	2500	2280	92
29	108	167	250	180	---	5190	10400	728	427	2420	1540	89
30	116	173	270	180	---	7180	9610	685	538	1960	1280	89
31	107	---	400	180	---	8470	---	643	---	1220	1160	---
TOTAL	2710	3578	9049	7070	8880	292020	204520	88531	32799	61704	64346	7325
MEAN	87.4	119	292	228	317	9420	6817	2856	1093	1990	2076	244
MAX	116	173	460	500	1200	27000	13400	8160	3290	6410	7500	917
MIN	62	85	158	180	150	1300	1910	643	423	360	264	89
CFSM	.04	.06	.14	.11	.15	4.51	3.26	1.37	.52	.95	.99	.12
IN.	.05	.06	.16	.13	.16	5.20	3.64	1.58	.58	1.10	1.14	.13

CAL YR 1978 TOTAL 521398 MEAN 1428 MAX 12900 MIN 62 CFSM .68 IN 9.28
WTR YR 1979 TOTAL 782532 MEAN 2144 MAX 27000 MIN 62 CFSM 1.03 IN 13.92

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site FL 02.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1978 to September 1979.

REMARKS.--Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,400 mg/L Apr. 14, 1979; minimum daily mean, 8 mg/L Dec. 15-24, 30, 31, 1978.
SEDIMENT LOADS: Maximum daily, 50,600 tons (45,900 metric tons) Apr. 14, 1979; minimum daily, 4.0 tons (3.6 metric tons) Dec. 20, 1978.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,400 mg/L Apr. 14; minimum daily mean, 8 mg/L Dec. 15-24, 30, 31.
SEDIMENT LOADS: Maximum daily, 50,600 tons (45,900 metric tons) Apr. 14; minimum daily, 4.0 tons (3.6 metric tons) Dec. 20.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
OCT									
19...	1200	17002	17002	--	83	690	8.7	12.0	10.0
26...	1145	80010	--	--	83	--	--	15.0	10.0
NOV									
15...	0800	17002	17002	--	94	690	8.1	2.0	6.0
DEC									
19...	1430	80010	--	--	295	--	--	.5	.5
28...	1300	17002	17002	--	449	430	8.4	-1.0	.0
FEB									
01...	1530	80010	--	--	116	--	--	.0	.0
22...	1000	17002	17002	350	--	580	7.3	2.0	.0
MAR									
12...	1530	80010	--	--	9490	--	--	1.0	1.0
28...	0700	17002	17002	--	4070	550	7.6	1.5	3.5
APR									
09...	1200	17002	17002	--	3540	580	8.1	1.5	4.5
26...	1000	17002	17002	--	7690	440	7.8	11.5	14.0
MAY									
03...	1500	80010	--	--	7000	--	--	15.5	12.0
JUN									
18...	1645	80010	--	--	1020	--	--	23.0	22.0
19...	0900	17002	17002	--	1069	600	7.6	21.0	19.0
JUL									
24...	1300	17002	17002	--	354	700	8.0	29.0	26.5
AUG									
22...	1200	17002	17002	--	495	400	7.7	28.0	22.0
SEP									
18...	1300	17002	17002	--	136	650	8.5	25.0	23.0
18...	1645	80010	--	--	136	--	--	19.5	21.0

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT									
19...	11.6	28	--	78	37	--	--	.30	.02
NOV									
15...	11.1	20	180	91	37	--	--	.30	.02
DEC									
28...	14.4	12	<10	120	42	--	--	2.3	.13
FEB									
22...	2.3	15	--	100	35	1	--	1.1	.91
MAR									
28...	11.6	16	--	--	--	31	10	8.6	.09
APR									
09...	11.2	20	--	--	--	56	15	9.2	.06
26...	9.6	64	4700	--	--	390	50	7.0	.11
MAY									
31...	--	20	--	--	--	33	3	6.6	.02
JUN									
19...	--	20	--	--	--	110	2	9.1	.09
JUL									
24...	--	12	--	--	--	88	15	6.5	.03
AUG									
22...	--	99	--	--	--	180	23	4.7	.17
SEP									
18...	11.1	16	<10	--	--	38	10	1.6	.03

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT								
19...	.10	--	--	10	--	--	.00	0
NOV								
15...	.00	--	--	0	--	--	--	2
DEC								
28...	.11	0	--	10	30	--	--	1
FEB								
22...	.16	--	0	10	--	--	.00	0
MAR								
28...	--	--	0	--	--	--	--	0
APR								
09...	.11	--	0	--	--	--	--	--
26...	--	--	30	--	--	--	--	0
MAY								
31...	--	--	20	--	--	.0	.00	0
JUN								
19...	--	--	0	--	--	--	--	--
JUL								
24...	--	--	0	--	--	.0	.00	1
AUG								
22...	--	--	10	--	--	--	--	--
SEP								
18...	--	--	0	--	--	--	--	--

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	89	95	23	112	29	8.8	168	13	5.9
2	86	95	22	112	31	9.4	158	14	6.0
3	81	95	21	109	34	10	193	12	6.3
4	82	95	21	105	45	13	241	23	15
5	91	97	24	104	47	13	252	18	12
6	88	75	18	85	48	11	259	15	10
7	84	55	12	103	43	12	279	15	11
8	85	45	10	112	35	11	330	18	7.1
9	93	45	11	110	25	7.4	300	17	14
10	85	45	10	105	25	7.1	270	14	10
11	82	43	9.5	95	36	9.2	300	13	11
12	77	40	8.3	100	37	10	320	12	10
13	86	40	9.3	114	39	12	370	14	14
14	88	38	9.0	97	28	7.3	460	14	17
15	95	35	9.0	94	27	6.9	380	8	5.1
16	74	30	6.0	97	28	7.3	350	8	4.7
17	91	25	6.1	119	27	8.7	380	8	5.1
18	88	25	5.9	117	22	6.9	330	8	4.5
19	83	38	8.5	111	24	7.2	304	8	4.1
20	79	38	8.1	113	25	7.6	295	8	4.0
21	83	41	9.2	120	21	6.8	300	8	6.5
22	77	40	8.3	123	23	7.6	290	8	11
23	62	39	6.5	139	18	6.8	280	8	6.0
24	82	33	7.3	143	18	6.9	250	8	5.4
25	87	35	8.2	145	18	7.0	270	12	12
26	85	43	9.9	145	16	6.3	280	12	7.6
27	101	45	12	149	14	5.6	270	12	8.7
28	95	39	10	160	12	5.2	250	10	6.8
29	108	37	11	167	12	5.4	250	10	6.8
30	116	34	11	173	13	6.1	270	8	5.8
31	107	32	9.2	---	---	---	400	8	8.6
TOTAL	2710	---	354.3	3578	---	249.5	9049	---	262.0
		JANUARY			FEBRUARY			MARCH	
1	500	160	216	180	20	9.7	1300	24	84
2	450	138	168	180	20	9.7	3000	28	227
3	350	35	33	180	20	9.7	4500	61	741
4	300	30	24	180	20	9.7	10000	154	4160
5	250	30	20	160	20	8.6	20000	271	14600
6	220	28	17	150	20	8.1	25000	450	30400
7	210	28	16	150	20	8.1	27000	442	32200
8	200	28	15	150	20	8.1	25000	266	18000
9	200	28	15	150	20	8.1	20900	170	9590
10	200	28	15	150	20	8.1	16500	130	5790
11	200	28	15	150	20	8.1	12900	110	3830
12	200	28	15	150	20	8.1	10400	85	2390
13	200	28	15	150	20	8.1	8510	80	1840
14	200	25	13	150	20	8.1	7710	78	1620
15	200	25	13	150	20	8.1	6490	73	1280
16	230	25	16	150	20	8.1	5450	65	956
17	230	25	16	150	20	8.1	4600	55	683
18	230	25	16	150	20	8.1	4110	79	877
19	200	25	13	150	20	8.1	5290	315	4620
20	200	25	13	200	20	11	7400	177	3440
21	200	25	13	250	22	15	7690	135	2800
22	200	20	11	350	25	24	7040	139	2640
23	200	20	11	500	35	47	6150	139	1910
24	200	20	11	600	40	65	5430	60	880
25	200	20	11	800	45	97	5200	50	702
26	200	20	11	950	15	38	4980	45	605
27	180	20	9.7	1050	24	68	4520	50	610
28	180	20	9.7	1200	35	113	4110	65	721
29	180	20	9.7	---	---	---	5190	144	2190
30	180	20	9.7	---	---	---	7180	438	8680
31	180	20	9.7	---	---	---	8470	570	12800
TOTAL	7070	---	800.5	8880	---	638.8	292020	---	171866

05526000 IROQUOIS RIVER NEAR CHEBANSE, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	8630	240	5590	8160	80	1760	646	65	113
2	8290	150	3360	6670	77	1390	638	75	129
3	7630	120	2470	6900	238	4520	652	88	155
4	6530	105	1850	7650	204	4210	657	90	160
5	5740	100	1550	7050	115	2190	605	88	144
6	5150	90	1250	6090	108	1780	572	87	134
7	4500	87	1060	4980	100	1340	534	86	124
8	3700	85	849	4060	100	1100	584	148	321
9	3490	70	660	3340	100	902	2620	1060	6330
10	3220	45	391	2810	105	797	3290	760	6780
11	3350	225	2040	2360	103	656	2470	398	2770
12	8890	1300	28600	2010	100	543	1870	225	1140
13	12000	788	25600	1820	98	482	1670	190	857
14	13300	1400	50600	1780	97	466	1860	210	1050
15	13400	774	28200	1820	93	457	1700	180	826
16	11400	300	9230	2230	95	570	1490	160	644
17	9110	135	3320	2370	183	1170	1210	150	490
18	6690	125	2260	2260	162	983	1040	140	393
19	4770	125	1610	2150	127	733	1060	135	386
20	3640	115	1130	1730	110	514	982	132	350
21	2900	110	861	1460	106	418	963	160	416
22	2340	100	632	1290	98	341	969	145	379
23	1970	97	516	1110	85	255	888	140	336
24	1910	102	531	1000	85	229	777	130	273
25	3930	226	2440	928	83	208	648	128	224
26	7730	365	8270	879	78	185	547	115	170
27	10000	286	7680	806	67	146	469	113	143
28	10300	213	5930	762	65	134	423	110	126
29	10400	210	5900	728	63	124	427	108	125
30	9610	118	3110	685	61	113	538	110	160
31	---	---	---	643	61	106	---	---	---
TOTAL	204520	---	207490	88531	---	28822	32799	---	25648
		JULY			AUGUST			SEPTEMBER	
1	527	118	168	778	150	315	917	110	272
2	516	118	164	674	145	264	743	100	201
3	486	130	171	991	145	388	618	95	159
4	2140	784	5040	1370	255	943	510	85	117
5	5610	572	8740	1070	175	506	416	83	93
6	6410	828	14400	825	160	356	377	80	81
7	5090	408	5800	725	135	264	345	90	84
8	3130	274	2360	651	135	237	299	85	69
9	2100	251	1480	548	131	194	273	75	55
10	2800	375	2940	465	125	157	243	65	43
11	3100	581	4910	435	125	147	226	65	40
12	2580	415	3000	494	120	160	187	60	30
13	2030	300	1640	455	120	147	187	58	29
14	1450	235	920	406	120	132	170	55	25
15	1240	165	552	349	120	113	157	53	22
16	2180	483	3060	308	120	100	157	50	21
17	2410	555	3620	264	150	107	137	50	18
18	1880	310	1570	368	160	159	133	50	18
19	1170	210	663	1060	194	555	121	50	16
20	802	165	357	5000	397	5360	117	47	15
21	623	130	219	7500	311	6300	114	46	14
22	496	120	161	7090	553	10600	106	45	13
23	414	115	129	6500	415	7280	102	45	12
24	360	104	101	6020	285	4630	106	45	13
25	460	101	125	5510	220	3270	102	45	12
26	1350	222	915	4710	212	2700	96	44	11
27	2150	240	1370	3520	190	1810	96	43	11
28	2500	358	2440	2280	180	1110	92	41	10
29	2420	340	2240	1540	150	624	89	40	9.6
30	1960	250	1320	1280	130	449	89	40	9.6
31	1220	172	567	1160	115	360	---	---	---
TOTAL	61704	---	71142	64346	---	49737	7325	---	1523.2
YEAR	782532		558533.3						

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL

LOCATION.--Lat 41°20'48", long 88°11'11", in NW¼ sec.15, T.33 N., R.9 E., Will County, Hydrologic Unit 07120001, on right bank, 0.4 mi (0.6 km) downstream from Prairie Creek, 0.5 mi (0.8 km) upstream from bridge on Interstate 55, 5 mi (8 km) downstream from Wilmington, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--5,150 mi^2 (13,338 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 510.86 ft (155.710 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Slight diurnal fluctuation at low flow caused by powerplants above station.

AVERAGE DISCHARGE.--46 years, 4,092 ft^3/s (115.9 m^3/s), 10.79 in/yr (274 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,900 ft^3/s (2,150 m^3/s) July 13, 1957, gage height, 11.40 ft (3.475 m); maximum gage height, 13.88 ft (4.231 m) Jan. 30, 1968, ice jam; minimum discharge, 204 ft^3/s (5.78 m^3/s) Aug. 1, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in 1883, 1887 reached a stage of 16.73 ft (5.099 m), discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,000 ft^3/s (1,360 m^3/s) Mar. 8, gage height, 12.07 ft (3.679 m), ice jam; minimum, 508 ft^3/s (14.4 m^3/s) Dec. 29, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	746	878	1060	2300	1300	5000	17100	15600	3500	2220	2400	2600
2	728	888	1100	2000	1300	8000	17200	13800	3520	2100	1980	2350
3	728	878	1200	1800	1300	11000	16300	15200	3500	2020	1980	2120
4	695	854	1330	1600	1250	20000	14500	15800	3540	3170	1980	1890
5	712	853	1410	1500	1250	30000	13400	14600	3520	6350	2430	1720
6	721	868	1540	1450	1250	38000	12200	13300	3410	8230	2500	1600
7	717	873	1650	1400	1250	44000	11300	12000	3410	7490	3170	1510
8	715	882	1800	1350	1250	48000	10600	10700	3240	5340	2710	1430
9	719	866	1600	1300	1250	41000	10500	9690	4130	3790	2170	1130
10	725	852	1500	1300	1200	33000	9960	8840	6200	3280	2170	1320
11	767	822	1600	1300	1200	28700	10500	8150	5540	4160	1860	1260
12	765	843	1800	1300	1200	25400	22600	7470	4610	3900	1770	1200
13	736	869	2000	1300	1150	19000	21400	6950	4160	3320	1820	1150
14	724	868	2100	1300	1100	19600	20500	6690	4150	2740	1700	1090
15	721	819	1970	1300	1100	16300	20000	6440	3920	2270	1540	1080
16	728	822	2030	1350	1100	15300	18400	6480	3600	2360	1360	1060
17	728	897	2190	1350	1100	14500	15900	6670	3220	3170	1270	1030
18	781	883	1440	1350	1100	15000	13500	6500	3010	2990	1680	1010
19	817	884	1390	1300	1150	20900	11400	6100	3120	2360	2470	1000
20	817	891	1430	1300	1300	20900	10100	5650	2980	1800	6980	980
21	835	910	1550	1400	1500	18500	9190	5150	2830	1490	12200	969
22	835	913	1500	1500	1700	16500	8450	4740	2880	1290	10900	946
23	854	995	1450	1500	2000	15000	7750	4440	2790	1160	10000	932
24	817	1060	1300	1400	2500	14100	7370	4190	2620	1070	9180	907
25	891	1050	1400	1300	3000	13500	9090	3930	2440	1200	8150	902
26	970	1040	1500	1300	3500	12600	13900	3740	2280	1520	7230	907
27	930	1080	1400	1300	4000	11800	18200	3600	2150	2600	6070	913
28	891	1060	1300	1300	4500	11400	18400	3460	2050	3240	4630	848
29	891	1050	717	1300	---	14200	17800	3370	2020	3360	3550	814
30	911	1020	1210	1300	---	19500	17200	3350	2200	3320	2990	821
31	894	---	1720	1300	---	18300	---	3350	---	3170	2830	---
TOTAL	24509	27478	47187	44050	46800	639000	424710	239950	100540	96480	123670	37489
MEAN	791	916	1522	1421	1671	20610	14160	7740	3351	3112	3989	1250
MAX	970	1080	2190	2300	4500	48000	22600	15800	6200	8230	12200	2600
MIN	695	819	717	1300	1100	5000	7370	3350	2020	1070	1270	814
CFSM	.15	.18	.30	.28	.32	4.00	2.75	1.50	.65	.60	.78	.24
IN.	.18	.20	.34	.32	.34	4.62	3.07	1.73	.73	.70	.89	.27

CAL YR 1978 TOTAL 1373572 MEAN 3763 MAX 26500 MIN 620 CFSM .73 IN 9.92
WTR YR 1979 TOTAL 1851863 MEAN 5074 MAX 48000 MIN 695 CFSM .99 IN 13.38

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site F 01.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1978 to September 1979.

REMARKS.--Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,540 mg/L Apr. 12, 1979; minimum daily mean, 6 mg/L on many days in February.
SEDIMENT LOADS: Maximum daily, 94,000 tons (85,300 metric tons) Apr. 12, 1979; minimum daily, 19 tons (17 metric tons) Feb. 10-12, 1979.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,540 mg/L Apr. 12; minimum daily mean, 6 mg/L on many days in February.
SEDIMENT LOADS: Maximum daily, 94,000 tons (85,300 metric tons) Apr. 12; minimum daily, 19 tons (17 metric tons) Feb. 10-12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	HARDNESS (MG/L AS CACO3) (00900)
OCT												
30...	1610	80010	17003	941	670	8.7	19.5	12.0	7.0	14.3	17	310
NOV												
21...	1310	80010	17003	970	710	8.5	-.5	4.0	5.0	13.6	16	330
DEC												
15...	1530	80010	17003	1820	710	8.9	--	.5	3.0	16.6	34	360
JAN												
31...	1630	80010	17003	1500	575	7.7	-6.0	.0	2.0	12.8	9	340
MAR												
13...	1545	80010	17003	18400	495	7.4	8.0	1.5	6.0	13.4	17	190
APR												
25...	1630	80010	17003	9480	--	8.1	21.5	16.0	15	11.2	13	310
JUN												
13...	1630	80010	17003	4140	564	7.9	23.5	22.0	41	7.3	17	290
SEP												
19...	1400	80010	17003	1010	605	8.7	23.0	22.0	5.0	14.0	14	300

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT											
30...	76	28	15	10	.4	2.7	180	120	24	.2	.5
NOV											
21...	86	28	18	11	.4	2.5	210	120	29	.2	5.3
DEC											
15...	97	29	16	9	.4	2.8	230	130	34	.2	7.9
JAN											
31...	88	29	17	10	.4	2.5	220	120	28	.2	10
MAR											
13...	51	15	5.0	5	.2	3.0	110	68	15	.2	7.7
APR											
25...	80	26	7.5	5	.2	2.2	190	95	24	.2	5.7
JUN											
13...	73	25	7.9	6	.2	3.1	180	83	23	.2	9.9
SEP											
19...	70	29	15	10	.4	2.3	190	110	25	.2	5.5

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)
OCT									
30...	384	.52	976	13	2	.42	1.9	.01	.05
NOV									
21...	424	.58	1110	10	2	.88	3.9	.02	.07
DEC									
15...	465	.63	2290	17	16	1.2	5.5	.01	.04
JAN									
31...	452	.61	1830	4	3	1.2	5.7	.58	1.9
MAR									
13...	284	.39	14100	31	24	4.2	19	.04	.16
APR									
25...	388	.53	9930	34	27	4.1	19	.04	.16
JUN									
13...	361	.49	4040	66	58	4.8	21	.14	.46
SEP									
19...	383	.52	1040	5	2	.79	3.5	.00	.01

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT									
30...	.07	.00	.00	.54	.62	.00	.10	.00	<100
NOV									
21...	.23	.07	.10	.62	.85	.00	.00	.00	<100
DEC									
15...	.15	.23	.30	.78	.93	.12	.00	.00	<100
JAN									
31...	.54	.54	.70	.39	.93	.05	.05	.07	<100
MAR									
13...	.00	.00	.00	.85	.85	.14	.06	.13	<100
APR									
25...	.07	.00	.00	.85	.93	.06	.00	.04	<100
JUN									
13...	.00	.07	.10	.93	.93	.20	.08	.08	<100
SEP									
19...	.07	.00	.00	.54	.62	.54	.44	.54	<100

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT										
30...	100	100	<5	<5	<5	<5	10	<5	600	30
NOV										
21...	200	100	10	<5	<5	<5	10	<5	500	100
DEC										
15...	100	100	<5	<5	<5	<5	<5	<5	700	<10
JAN										
31...	100	100	<5	<5	<5	<5	10	10	200	80
MAR										
13...	100	100	<5	<5	<5	<5	30	20	2100	1000
APR										
25...	100	100	<5	<5	<5	<5	30	10	1400	420
JUN										
13...	100	100	<5	<5	20	20	40	10	2900	10
SEP										
19...	500	500	<5	<5	20	20	10	--	2500	210

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
30...	<50	<50	<5	40	10	<50	<5	150	20	20
NOV										
21...	<50	<50	<5	30	10	<50	<5	170	20	20
DEC										
15...	<50	<50	<5	90	30	<50	<5	200	20	20
JAN										
31...	30	<50	<5	20	20	<50	<5	190	10	10
MAR										
13...	30	<50	<5	160	150	10	<5	110	20	20
APR										
25...	20	<50	<5	70	40	<10	<5	200	20	20
JUN										
13...	20	<50	<5	110	10	<10	<5	190	30	<5
SEP										
19...	20	<50	10	40	10	<10	<5	180	<5	--

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	746	50	101	878	35	83	1060	32	92
2	728	40	79	888	36	86	1100	30	89
3	728	57	112	878	34	81	1200	30	97
4	695	51	96	854	33	76	1330	28	101
5	712	49	94	853	33	76	1410	26	99
6	721	49	95	868	35	82	1540	24	100
7	717	46	89	873	36	85	1650	22	98
8	715	40	77	882	36	86	1800	22	107
9	719	40	78	866	35	82	1600	24	104
10	725	36	70	852	34	78	1500	20	81
11	767	36	75	822	32	71	1600	18	78
12	765	36	74	843	34	77	1800	16	78
13	736	34	68	869	38	89	2000	15	81
14	724	32	63	868	37	87	2100	15	85
15	721	28	55	819	30	66	1970	15	80
16	728	26	51	822	30	67	2030	15	82
17	728	24	47	897	40	97	2190	15	89
18	781	26	55	883	39	93	1440	14	54
19	817	24	53	884	38	91	1390	14	53
20	817	24	53	891	38	91	1430	13	50
21	835	23	52	910	38	93	1550	12	50
22	835	23	52	913	38	94	1500	12	49
23	854	32	74	995	40	107	1450	12	47
24	817	29	64	1060	42	120	1300	11	39
25	891	39	94	1050	42	119	1400	11	42
26	970	43	113	1040	40	112	1500	10	40
27	930	40	100	1080	40	117	1400	10	38
28	891	39	94	1060	38	109	1300	10	35
29	891	39	94	1060	36	103	717	10	19
30	911	38	93	1020	34	94	1210	10	33
31	894	39	94	---	---	---	1720	10	46
TOTAL	24509	---	2409	27478	---	2712	47187	---	2136
		JANUARY			FEBRUARY			MARCH	
1	2300	10	62	1300	6	21	5000	150	2030
2	2000	10	54	1300	6	21	8000	200	4320
3	1800	9	44	1300	6	21	11000	219	6500
4	1600	9	39	1250	6	20	20000	491	26500
5	1500	9	36	1250	7	24	30000	297	24100
6	1450	10	39	1250	6	20	38000	305	31300
7	1400	10	38	1250	6	20	44000	412	48900
8	1350	9	33	1250	6	20	48000	468	60700
9	1300	9	32	1250	6	20	41000	263	29100
10	1300	9	32	1200	6	19	33000	175	15600
11	1300	9	32	1200	6	19	28700	119	9220
12	1300	8	28	1200	6	19	25400	83	5690
13	1300	8	28	1150	7	22	19000	82	4210
14	1300	8	28	1100	7	21	19600	195	10300
15	1300	9	32	1100	7	21	16300	93	4090
16	1350	8	29	1100	7	21	15300	48	1980
17	1350	8	29	1100	7	21	14500	28	1100
18	1350	8	29	1100	8	24	15000	48	1940
19	1300	8	28	1150	8	25	20900	263	14800
20	1300	9	32	1300	7	25	20900	218	12300
21	1400	8	30	1500	7	28	18500	146	7290
22	1500	9	36	1700	6	28	16500	103	4590
23	1500	9	36	2000	6	32	15000	72	2920
24	1400	9	34	2500	6	40	14100	65	2470
25	1300	9	32	3000	7	57	13500	60	2190
26	1300	9	32	3500	6	57	12600	57	1940
27	1300	8	28	4000	30	324	11800	55	1750
28	1300	8	28	4500	80	972	11400	36	1110
29	1300	8	28	---	---	---	14200	198	7590
30	1300	7	25	---	---	---	19500	330	17400
31	1300	7	25	---	---	---	18300	340	16800
TOTAL	44050	---	1038	46800	---	1962	639000	---	380730

05527500 KANKAKEE RIVER NEAR WILMINGTON, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	17100	308	14200	15600	65	2740	3500	28	265
2	17200	201	9330	13800	45	1680	3520	28	266
3	16300	155	6820	15200	146	5990	3500	28	265
4	14500	110	4310	15800	166	7080	3540	28	268
5	13400	83	3000	14600	96	3780	3520	28	266
6	12200	78	2570	13300	78	2800	3410	28	258
7	11300	70	2140	12000	68	2200	3410	28	258
8	10600	65	1860	10700	64	1850	3240	28	245
9	10500	45	1280	9690	55	1440	4130	69	769
10	9960	45	1210	8840	45	1070	6200	265	4440
11	10500	57	1620	8150	43	946	5540	240	3590
12	22600	1540	94000	7470	38	766	4610	230	2860
13	21400	818	47300	6950	36	676	4160	145	1630
14	20500	601	33300	6690	32	578	4150	155	1740
15	20000	627	33900	6440	32	556	3920	80	847
16	18400	394	19600	6480	34	595	3600	80	778
17	15900	184	7900	6670	34	612	3220	78	678
18	13500	105	3830	6500	34	597	3010	78	634
19	11400	99	3050	6100	33	544	3120	78	657
20	10100	100	2730	5650	32	488	2980	78	628
21	9190	80	1990	5150	32	445	2830	80	611
22	8450	73	1670	4740	32	410	2880	75	583
23	7750	65	1360	4440	32	384	2790	75	565
24	7370	63	1250	4190	32	362	2620	65	460
25	9090	45	1100	3930	30	318	2440	55	362
26	13900	160	6000	3740	30	303	2280	45	277
27	18200	388	19100	3600	30	292	2150	40	232
28	18400	183	9090	3460	30	280	2050	35	194
29	17800	183	8790	3370	30	273	2020	30	164
30	17200	115	5340	3350	30	271	2200	30	178
31	---	---	---	3350	30	271	---	---	---
TOTAL	424710	---	349640	239950	---	40597	100540	---	24968
		JULY			AUGUST			SEPTEMBER	
1	2220	25	150	2400	110	713	2600	80	562
2	2100	25	142	1980	90	481	2350	80	508
3	2020	25	136	1980	75	401	2120	65	372
4	3170	27	231	1980	65	347	1890	65	332
5	6350	161	2760	2430	80	525	1720	65	302
6	8230	636	14100	2500	90	607	1600	63	272
7	7490	638	12900	3170	85	728	1510	65	265
8	5340	335	4830	2710	75	549	1430	53	205
9	3790	179	1830	2170	85	498	1130	50	153
10	3280	155	1370	2170	80	469	1320	53	189
11	4160	155	1740	1860	70	352	1260	50	170
12	3900	160	1680	1770	65	311	1200	50	162
13	3320	140	1250	1820	65	319	1150	50	155
14	2740	110	814	1700	63	289	1090	48	141
15	2270	100	613	1540	58	241	1080	45	131
16	2360	80	510	1360	55	202	1060	43	123
17	3170	75	642	1270	54	185	1030	42	117
18	2990	75	605	1680	53	240	1010	41	112
19	2360	75	478	2470	85	567	1000	40	108
20	1800	72	350	6980	145	2730	980	37	98
21	1490	45	181	12200	530	17500	969	37	97
22	1290	40	139	10900	450	13200	946	37	95
23	1160	40	125	10000	350	9450	932	36	91
24	1070	40	116	9180	220	5450	907	33	81
25	1200	40	130	8150	190	4180	902	34	83
26	1520	40	164	7230	150	2930	907	35	86
27	2600	40	281	6070	140	2300	913	36	89
28	3240	60	525	4630	128	1600	848	35	80
29	3360	137	1240	3550	85	815	814	32	70
30	3320	100	896	2990	79	638	821	30	67
31	3170	110	941	2830	75	573	---	---	---
TOTAL	96480	---	51869	123670	---	69390	37489	---	5316
YEAR	1851863		932767						

05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATION.--Lat 42°29'22", long 87°55'32", in SE¼ sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, at center of downstream side of bridge on Russell Road, 0.3 mi (0.5 km) west of Russell, 7.2 mi (11.6 km) upstream from Mill Creek, and at mile 109.3 (175.9 km).

DRAINAGE AREA.--123 mi^2 (319 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961-63, and annual maximum, water years 1962-66. June 1967 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area. WDR IL-76: 1960-68(M), 1973(M).

GAGE.--Water-stage recorder. Datum of gage is 662.00 ft (201.778 m) National Geodetic Vertical Datum of 1929. Oct. 17, 1961, to June 29, 1967, crest-stage gage at left downstream side of bridge at datum 4.29 ft (1.308 m) higher.

REMARKS.--Water-discharge records fair except those for period of no gage-height record, Nov. 22 to Mar. 18, which are poor.

AVERAGE DISCHARGE.--12 years, 97.0 ft^3/s (2.747 m^3/s), 10.71 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft^3/s (60.0 m^3/s) Mar. 21, 1979, gage height, 9.69 ft (2.954 m); maximum gage height, 10.75 ft (3.277 m) Mar. 6, 1976; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,120 ft^3/s (60.0 m^3/s) Mar. 21, gage height, 9.69 ft (2.954 m); minimum, 1.9 ft^3/s (0.054 m^3/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	17	28	14	13	32	640	698	25	103	4.2	183
2	51	16	27	15	13	35	795	564	22	103	4.8	159
3	49	16	37	15	14	43	770	522	19	72	5.2	110
4	48	16	47	15	14	95	600	491	16	44	4.8	64
5	47	16	74	15	13	225	450	449	14	34	7.0	38
6	47	16	81	14	14	260	400	403	14	28	9.3	27
7	47	16	60	14	14	305	345	346	16	24	8.5	22
8	41	16	46	14	13	340	310	281	20	22	7.3	18
9	37	16	40	13	14	385	286	225	40	18	7.5	15
10	34	15	35	13	13	430	256	193	137	16	8.0	13
11	33	15	32	12	13	450	269	168	217	15	12	12
12	31	14	31	11	14	475	363	149	257	14	12	10
13	29	15	30	12	14	560	508	136	252	13	8.5	9.1
14	28	20	30	11	14	764	550	124	210	12	5.9	8.8
15	25	23	29	11	15	900	536	114	150	10	4.2	7.8
16	25	22	28	12	14	920	426	105	95	9.0	4.2	6.1
17	28	23	26	12	13	940	371	92	62	8.0	11	4.8
18	32	38	27	12	14	1020	302	79	45	6.8	228	4.4
19	31	49	27	12	15	1130	244	65	36	7.3	263	3.7
20	29	42	28	12	15	1780	207	58	35	6.6	224	4.5
21	27	34	26	13	16	2100	180	52	33	6.1	173	4.7
22	24	28	24	12	17	1880	160	44	30	6.1	121	4.2
23	22	31	23	12	20	1330	142	39	26	5.9	101	4.1
24	22	33	21	13	24	980	130	36	22	5.5	116	3.9
25	22	40	20	12	27	720	139	34	18	5.7	112	3.5
26	23	36	20	12	29	580	270	32	19	4.6	79	2.8
27	23	33	18	13	29	480	519	26	18	4.4	53	2.5
28	22	30	17	12	30	445	925	23	16	4.4	46	2.3
29	20	28	19	13	---	370	1000	22	19	4.0	114	2.8
30	18	27	21	14	---	400	873	21	55	4.8	169	2.8
31	18	---	16	14	---	500	---	23	---	5.0	185	---
TOTAL	991	741	988	399	468	20874	12966	5614	1938	622.2	2108.4	753.8
MEAN	32.0	24.7	31.9	12.9	16.7	673	432	181	64.6	20.1	68.0	25.1
MAX	58	49	81	15	30	2100	1000	698	257	103	263	183
MIN	18	14	16	11	13	32	130	21	14	4.0	4.2	2.3
CFSM	.26	.20	.26	.11	.14	5.47	3.51	1.47	.53	.16	.55	.20
IN.	.30	.22	.30	.12	.14	6.31	3.92	1.70	.59	.19	.64	.23

CAL YR 1978 TOTAL 54220.9 MEAN 149 MAX 1350 MIN 8.2 CFSM 1.21 IN 16.40
WTR YR 1979 TOTAL 48463.4 MEAN 133 MAX 2100 MIN 2.3 CFSM 1.08 IN 14.66

05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-60, 1964-69, 1971-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 08.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
11...	1200	80010	--	--	33	--	--	15.5	13.5	--	--
12...	1000	17002	17002	--	31	1200	7.9	11.5	12.5	--	32
NOV											
09...	1000	17002	17002	--	16	1100	8.1	15.5	7.0	12.0	20
09...	1100	17002	17002	--	16	1040	8.2	16.5	8.0	12.2	20
14...	1125	80010	--	--	20	--	--	3.0	6.0	--	--
DEC											
11...	0900	17002	17002	32	--	1100	--	-1.5	.0	11.1	24
14...	1100	80010	--	--	30	--	--	-2.5	.5	--	--
27...	0900	17002	17002	18	--	1210	7.9	-8.5	.0	13.8	16
JAN											
22...	1445	80010	--	--	12	--	--	-6.5	.0	--	--
FEB											
05...	1130	80010	--	--	13	--	--	-25.0	.0	--	--
07...	1000	17002	17002	14	--	980	8.7	-14.5	.0	5.2	12
23...	1050	80010	--	--	20	--	--	5.0	.0	--	--
MAR											
14...	1300	17002	17002	--	764	650	7.2	.0	.0	9.2	24
19...	1500	80010	--	--	1180	--	--	7.0	1.0	--	--
20...	1450	80010	--	--	1930	--	--	9.5	6.0	--	--
APR											
02...	1100	17002	17002	--	877	440	6.7	1.5	1.0	10.6	24
16...	0900	17002	17002	--	426	570	8.1	9.0	8.5	7.6	24
MAY											
09...	1515	80010	--	--	216	--	--	32.0	24.0	--	--
15...	1500	17002	17002	--	114	720	--	17.0	16.5	--	28
JUN											
07...	0900	17002	17002	--	15	--	--	24.5	21.0	6.1	36
11...	1155	80010	--	--	221	--	--	19.0	21.0	--	--
20...	1415	80010	--	--	36	--	--	27.0	26.5	--	--
JUL											
23...	1300	17002	17002	--	5.7	1200	8.0	31.0	28.0	9.6	20
23...	1400	17002	17002	--	5.9	1200	8.0	31.0	28.0	10.0	24
25...	1200	80010	--	--	6.1	--	--	25.0	26.0	--	--
AUG											
21...	1300	17002	17002	--	172	650	7.4	22.0	21.0	4.2	28
SEP											
05...	1300	17002	17002	--	41	900	7.9	25.5	22.0	5.9	39
10...	1100	80010	--	--	14	--	--	25.0	19.5	--	--

05527800 DES PLAINES RIVER AT RUSSELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
OCT								
12...	--	165	52	--	--	2.1	.07	--
NOV								
09...	270	220	50	--	--	.80	.05	--
09...	--	215	47	--	--	2.4	.04	--
DEC								
11...	<100	160	77	--	--	4.0	.30	.10
27...	--	175	83	--	--	2.7	.35	--
FEB								
07...	160	150	70	--	--	1.6	.62	--
MAR								
14...	--	--	--	7	--	5.0	.17	--
APR								
02...	--	--	--	57	17	3.8	.05	--
16...	--	--	--	52	16	4.0	.04	--
MAY								
15...	--	--	--	54	9	1.9	.06	--
JUN								
07...	91	--	--	100	20	.90	.06	--
JUL								
23...	1300	--	--	100	25	--	.03	--
23...	930	--	--	95	24	--	.03	--
AUG								
21...	1200	--	--	60	56	1.4	.23	--
SEP								
05...	410	--	--	100	18	.80	.09	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
12...	0	0	20	2000	10	--	--	--	--	2
NOV										
09...	0	0	0	--	0	--	--	--	--	0
09...	0	0	0	--	0	--	--	--	--	0
DEC										
11...	--	0	0	--	0	--	--	--	--	1
27...	0	0	10	--	10	--	--	--	--	1
FEB										
07...	0	0	10	--	0	--	--	--	--	2
MAR										
14...	--	--	--	--	--	--	.0	--	--	1
APR										
02...	--	0	30	--	--	--	--	--	--	0
MAY										
15...	--	0	0	--	0	--	--	--	--	--
JUN										
07...	--	0	0	--	--	--	--	0	--	--
JUL										
23...	--	--	10	--	0	280	--	--	--	--
23...	--	--	0	--	0	290	--	--	--	--
AUG										
21...	--	0	10	--	0	--	.0	0	.00	--

DATE	ARSENIC TOTAL RECOVERABLE (UG/L AS AS) (01002)
OCT	
12...	0
NOV	
09...	0
09...	0
DEC	
11...	--
27...	0
FEB	
07...	0
MAR	
14...	--
APR	
02...	--
MAY	
15...	--
JUN	
07...	--
JUL	
23...	--
23...	--
AUG	
21...	1

05528000 DES PLAINES RIVER NEAR GURNEE, IL

LOCATION.--Lat 42°20'39", long 87°56'18", in SE¼SW¼ sec.27, T.45 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank 800 ft (244 m) upstream from bridge on State Highway 120, 2.5 mi (4.0 km) southwest of Gurnee, and at mile 94.2 (151.6 km).

DRAINAGE AREA.--232 mi^2 (601 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1958, and annual maximum, water years 1960-68, October 1968 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area. WDR IL-76: 1960(M), 1962(M). WDR IL-77: 1971.

GAGE.--Water-stage recorder. Datum of gage is 650.30 ft (198.211 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to May 26, 1946, nonrecording gage at site 825 ft (251 m) downstream at same datum. May 27, 1946, to Sept. 30, 1958, water-stage recorder at site 800 ft (244 m) downstream at same datum. Dec. 17, 1959, to September 1968, crest-stage gage at site 800 ft (244 m) downstream at same datum.

REMARKS.--Water-discharge records good. Effluent from sewage treatment plants 0.5 mi (0.8 km) upstream averaged about 35 ft^3/s (1.0 m^3/s).

AVERAGE DISCHARGE.--24 years (water years 1946-58, 1969-79), 164 ft^3/s (4.644 m^3/s), 9.60 in/yr (244 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,070 ft^3/s (86.9 m^3/s) Apr. 3, 1960, gage height, 10.64 ft (3.243 m); no flow Sept. 26 to Oct. 19, 1956, and part of each day Aug. 27-30, Sept. 1, 2, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,860 ft^3/s (81.0 m^3/s) Mar. 22, gage height, 10.29 ft (3.136 m); minimum daily, 24 ft^3/s (0.68 m^3/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	72	113	86	75	184	1760	1700	95	135	46	320
2	159	69	109	91	76	205	1900	1850	94	153	44	301
3	152	70	148	87	82	230	1890	1780	88	155	59	275
4	144	68	182	87	83	531	1740	1470	83	126	88	244
5	142	68	204	88	82	667	1530	1200	80	101	163	196
6	136	71	207	87	83	774	1280	1000	76	89	230	152
7	130	69	181	83	85	926	1060	860	88	79	146	127
8	124	68	168	83	78	1040	900	755	95	70	113	113
9	119	67	164	79	80	1220	784	684	107	72	123	102
10	115	65	141	76	79	1330	674	583	192	67	122	94
11	112	63	127	70	79	1420	615	500	219	65	104	87
12	108	60	125	69	83	1410	925	428	251	63	91	82
13	105	84	126	70	83	1450	1020	366	277	60	82	76
14	102	89	116	68	83	1590	1100	326	288	56	76	72
15	96	87	112	70	86	1600	1150	309	272	54	66	66
16	102	86	110	69	87	1530	1110	277	226	54	62	62
17	101	112	107	72	82	1520	1000	248	166	49	79	60
18	101	123	108	72	83	1670	845	224	128	47	359	56
19	102	129	108	71	87	2110	687	204	112	45	508	53
20	98	130	114	73	88	2470	569	183	104	47	582	51
21	94	120	117	75	93	2760	474	170	97	45	558	50
22	88	107	115	77	96	2850	406	157	90	48	510	47
23	86	125	114	78	120	2780	356	148	82	50	584	44
24	85	129	108	79	140	2570	326	136	76	51	440	33
25	85	137	96	74	162	2300	318	128	73	52	349	24
26	85	134	103	76	171	2010	640	122	68	48	289	45
27	84	133	92	74	174	1710	840	114	67	49	273	50
28	80	127	89	74	179	1490	1200	106	67	77	242	48
29	75	117	83	79	---	1380	1500	102	115	56	294	46
30	74	108	97	80	---	1450	1610	97	122	50	324	40
31	73	---	92	80	---	1620	---	96	---	48	336	---
TOTAL	3327	2887	3876	2397	2779	46797	30209	16323	3898	2161	7342	3016
MEAN	107	96.2	125	77.3	99.3	1510	1007	527	130	69.7	237	101
MAX	170	137	207	91	179	2850	1900	1850	288	155	584	320
MIN	73	60	83	68	75	184	318	96	67	45	44	24
CFSM	.46	.42	.54	.33	.43	6.51	4.34	2.27	.56	.30	1.02	.44
IN.	.53	.46	.62	.38	.45	7.50	4.84	2.62	.63	.35	1.18	.48

CAL YR 1978 TOTAL 99364 MEAN 272 MAX 1690 MIN 23 CFSM 1.17 IN 15.43
WTR YR 1979 TOTAL 125012 MEAN 342 MAX 2850 MIN 24 CFSM 1.47 IN 20.04

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year. Additional chemical data for water years 1959-61, 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 07.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	HARDNESS (MG/L AS CACO3) (00900)
OCT												
11...	0940	80010	17003	106	985	7.9	16.0	15.5	21	7.7	32	430
NOV												
14...	1500	80010	17003	85	985	7.7	4.0	11.5	14	8.8	13	390
DEC												
14...	1350	80010	17003	116	1160	7.9	1.0	4.0	6.0	11.4	31	450
JAN												
22...	1200	80010	17003	73	1140	7.5	-6.0	5.5	4.0	9.2	36	400
FEB												
23...	0930	80010	17003	109	1230	7.7	4.5	5.5	8.0	9.8	30	410
MAR												
20...	1210	80010	--	2450	--	--	7.0	5.0	--	--	--	--
21...	1030	80010	17003	2600	440	7.9	4.0	5.0	21	10.0	14	200
APR												
18...	1200	80010	17003	818	640	7.6	21.5	12.5	32	8.2	19	280
MAY												
09...	1215	80010	17003	683	660	8.0	31.0	21.0	18	5.4	17	300
JUN												
14...	1140	80010	17003	287	745	7.6	25.5	21.0	27	6.3	31	320
JUL												
30...	1330	80010	17003	57	1020	7.4	26.0	23.5	21	6.4	31	330
AUG												
27...	1130	80010	17003	276	765	7.3	23.0	21.0	65	6.5	27	310
SEP												
18...	0930	80010	17003	51	1015	7.6	20.5	19.0	17	7.1	23	360

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT											
11...	99	45	49	20	1.0	5.5	270	150	72	.5	10
NOV											
14...	87	39	72	29	1.6	9.1	230	170	93	.5	7.2
DEC											
14...	100	47	68	25	1.4	5.9	280	160	100	.5	9.5
JAN											
22...	93	41	84	31	1.8	6.7	250	170	110	.4	9.5
FEB											
23...	94	41	97	34	2.1	6.1	270	130	160	.5	9.6
MAR											
21...	46	21	14	13	.4	2.7	130	54	32	.2	6.9
APR											
18...	65	28	23	15	.6	2.9	180	79	47	.2	5.3
MAY											
09...	67	31	23	15	.6	3.0	210	79	47	.3	2.8
JUN											
14...	71	33	26	15	.7	4.0	200	90	50	.3	9.7
JUL											
30...	80	31	77	33	1.8	9.5	180	150	95	.6	9.2
AUG											
27...	72	32	35	19	.9	6.8	220	100	54	.3	7.8
SEP											
18...	85	35	67	29	1.6	7.1	210	140	98	.6	11

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)
OCT 11...	611	.83	175	48	7	4.8	21	.01	.06
NOV 14...	642	.87	147	23	5	4.4	20	.01	.05
DEC 14...	679	.92	213	45	33	4.6	20	.02	.07
JAN 22...	701	.95	138	7	6	5.4	24	.02	.09
FEB 23...	731	.99	215	11	7	3.1	14	.02	.07
MAR 21...	265	.36	1860	23	7	3.7	17	.05	.19
APR 18...	392	.53	866	33	24	2.6	12	.04	.15
MAY 09...	398	.54	734	32	24	1.7	7.7	.05	.18
JUN 14...	435	.59	337	62	50	5.8	26	.13	.44
JUL 30...	628	.85	96.6	37	30	10	46	.09	.31
AUG 27...	466	.63	347	136	119	3.1	14	.06	.22
SEP 18...	625	.85	86.1	38	33	8.7	39	.02	.08

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 11...	.31	.15	.20	1.2	1.5	.76	.66	.67	<100
NOV 14...	.62	.62	.80	1.2	1.8	.70	.60	.65	<100
DEC 14...	1.0	1.0	1.4	1.2	2.3	.50	.50	.45	<100
JAN 22...	1.4	1.4	1.9	.47	1.9	.91	.66	.76	<100
FEB 23...	2.0	3.3	4.3	2.5	4.5	.53	.41	.49	<100
MAR 21...	.07	.15	.20	.78	.85	.17	.06	.11	<100
APR 18...	.07	.46	.60	1.0	1.0	.19	.09	.16	<100
MAY 09...	.15	.54	.70	1.0	1.1	.23	.11	.15	<100
JUN 14...	.00	.46	.60	1.6	1.6	.43	.29	.24	<100
JUL 30...	.46	.23	.30	.78	1.2	1.5	1.3	1.4	<100
AUG 27...	.15	.07	.10	1.4	1.5	.56	.32	.38	<100
SEP 18...	.15	.15	.20	1.3	1.4	1.1	.96	1.1	<100

05528000 DES PLAINES RIVER NEAR GURNEE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT 11...	200	200	<5	<5	<5	<5	10	10	1800	60
NOV 14...	300	300	<5	<5	10	<5	10	<5	1200	30
DEC 14...	300	300	10	<5	40	40	10	10	500	30
JAN 22...	300	300	<5	<5	<5	<5	10	<5	400	<10
FEB 23...	200	200	<5	<5	<5	<5	10	<5	600	50
MAR 21...	100	100	90	<5	<5	<5	10	<5	1300	30
APR 18...	100	100	<5	<5	10	10	10	10	1900	50
MAY 09...	100	100	<5	<5	10	10	10	<5	1200	20
JUN 14...	100	100	<5	<5	<5	<5	10	10	1900	40
JUL 30...	400	400	<5	<5	50	50	10	10	1000	10
AUG 27...	200	200	<5	<5	10	<5	40	10	4800	30
SEP 18...	400	400	<5	<5	<5	<5	10	10	1200	<10

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 11...	<50	<50	10	190	140	<50	<5	550	50	20
NOV 14...	<50	<50	10	170	160	<50	<5	590	30	30
DEC 14...	380	<50	20	110	100	<50	<5	490	70	70
JAN 22...	<50	<50	<5	130	130	<50	<5	490	50	30
FEB 23...	30	<50	10	130	130	90	<5	450	40	40
MAR 21...	1000	<50	<5	30	10	<10	<5	150	30	20
APR 18...	20	<50	10	40	20	<10	<5	210	20	10
MAY 09...	20	<50	<5	80	30	<10	<5	260	30	10
JUN 14...	10	<50	<5	110	40	10	<5	330	30	<5
JUL 30...	10	<50	10	110	100	10	<5	670	40	10
AUG 27...	10	<50	<5	190	70	20	<5	420	50	10
SEP 18...	20	<50	10	130	90	<10	<5	600	30	10

05528500 BUFFALO CREEK NEAR WHEELING, IL

LOCATION.--Lat 42°09'50", long 87°57'25", in NE¼NW¼ sec.4, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on Buffalo Grove Road, 1.0 mi (1.6 km) downstream from unnamed tributary, 2.5 mi (4.0 km) west of Wheeling, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--19.6 mi^2 (50.8 km^2).

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 658.60 ft (200.741 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--27 years, 16.3 ft^3/s (0.462 m^3/s), 11.29 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 802 ft^3/s (22.7 m^3/s) Aug. 25, 1972, gage height, 7.27 ft (2.216 m); no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1745	360	10.2	5.94	1.811	Apr. 11	2330	*409	11.6	*6.26	1.908
Mar. 13	1900	205	5.81	4.50	1.372	Apr. 26	0415	217	6.15	4.63	1.411
Mar. 19	0500	341	9.66	5.80	1.768	May 3	0130	233	6.60	4.80	1.463
Mar. 29	1530	310	8.78	5.56	1.695						

No flow on July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.7	9.2	12	11	47	119	58	7.8	10	.61	10
2	12	6.7	8.8	11	9.8	45	134	49	6.5	7.8	.49	7.8
3	12	6.7	28	10	9.5	88	98	149	5.8	5.8	3.3	6.2
4	11	6.4	30	9.6	9.2	332	73	96	5.0	4.4	1.2	5.6
5	9.9	6.4	26	9.2	8.8	316	55	60	4.7	3.3	10	4.7
6	8.5	9.5	22	9.0	8.6	242	41	42	5.0	2.1	13	4.0
7	7.6	7.3	19	8.6	9.0	187	35	34	7.5	1.5	7.1	3.5
8	7.0	6.7	16	8.8	8.8	169	34	28	13	2.8	5.8	2.8
9	6.7	6.7	15	8.2	8.2	179	34	28	21	2.4	14	2.4
10	7.0	6.4	14	8.3	8.4	129	32	28	26	1.1	68	2.8
11	7.0	6.2	15	8.2	7.8	94	60	29	19	.78	39	1.2
12	7.3	6.2	14	7.9	8.0	71	270	23	12	.78	24	3.0
13	6.7	20	14	8.0	7.9	108	166	21	9.7	.78	14	2.8
14	7.0	11	14	9.0	7.9	154	92	22	8.2	.78	8.9	3.0
15	7.3	8.7	13	9.7	7.3	108	61	21	6.2	.88	6.5	2.4
16	11	7.2	13	8.4	7.0	82	45	20	5.6	.61	5.3	1.1
17	7.6	32	12	8.0	7.2	89	35	18	4.4	.43	15	.88
18	6.7	18	12	7.9	7.8	176	31	16	4.7	.28	40	.78
19	6.7	15	12	8.2	8.0	322	27	16	4.2	.24	24	.69
20	6.6	11	15	9.1	10	256	24	15	4.4	.21	28	.61
21	6.7	9.5	16	9.2	15	153	22	13	4.0	.00	19	.49
22	6.9	8.8	15	8.7	28	105	20	12	3.3	1.2	16	.24
23	9.4	20	14	9.2	68	90	19	11	2.6	.78	19	.11
24	7.7	17	14	9.8	58	122	20	11	2.3	.69	15	.24
25	12	14	12	9.0	52	98	22	10	1.9	3.0	10	.28
26	14	12	9.6	9.0	47	73	125	10	1.6	.98	7.5	.24
27	12	12	9.6	9.4	45	58	101	12	1.6	.61	10	.17
28	9.3	11	9.2	9.5	42	56	89	11	2.3	3.5	8.5	.32
29	8.5	11	10	9.7	---	153	78	10	31	1.3	25	.37
30	7.9	9.9	16	9.7	---	250	76	8.9	14	4.2	20	.24
31	7.6	---	14	10	---	194	---	8.2	---	2.4	14	---
TOTAL	268.6	330.0	461.4	282.3	525.2	4546	2038	890.1	245.3	65.63	492.20	68.96
MEAN	8.66	11.0	14.9	9.11	18.8	147	67.9	28.7	8.18	2.12	15.9	2.30
MAX	14	32	30	12	68	332	270	149	31	10	68	10
MIN	6.6	6.2	8.8	7.9	7.0	45	19	8.2	1.6	.00	.49	.11
CFSM	.44	.56	.76	.47	.96	7.50	3.46	1.46	.42	.11	.81	.12
IN.	.51	.63	.88	.54	1.00	8.63	3.87	1.69	.47	.12	.93	.13

CAL YR 1978 TOTAL 7726.30 MEAN 21.2 MAX 281 MIN 1.0 CFSM 1.08 IN 14.66
WTR YR 1979 TOTAL 10213.69 MEAN 28.0 MAX 332 MIN .00 CFSM 1.43 IN 19.38

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL

LOCATION.--Lat 42°04'55", long 87°53'25", in SE¼SE¼ sec.25, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on right bank 50 ft (15 m) upstream from Dam No. 2 of Cook County Forest Preserve, 0.3 mi (0.5 km) downstream from Lake Avenue Bridge, 1.2 mi (1.9 km) upstream from Central Road bridge, 2.5 miles (4.0 km) north of Des Plaines, and at mile 69.3 (111.5 km).

DRAINAGE AREA.--360 mi^2 (932 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 975: 1942. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 626.31 ft (190.899 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 8, 1941, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--39 years, 246 ft^3/s (6.967 m^3/s), 9.28 in/yr (236 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,670 ft^3/s (132 m^3/s) Apr. 2, 1960, gage height, 8.56 ft (2.609 m); no flow for many days in 1944, 1946, and Aug. 7, 8, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 4, 1938, reached a stage of 9.0 ft (2.74 m), from floodmark, discharge, 5,000 ft^3/s (142 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	0600	2380	67.4	5.21	1.588	Apr. 12	1330	2280	64.6	4.96	1.512
Mar. 20	2015	*3430	97.1	*7.34	2.237	May 3	1130	2500	70.8	5.55	1.692

Minimum discharge, 47 ft^3/s (1.33 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	97	184	158	135	340	2380	2000	144	191	76	398
2	219	97	192	160	137	370	2310	1990	139	185	73	369
3	214	95	260	157	142	480	2320	2430	130	193	84	336
4	196	99	364	150	145	1920	2220	2220	118	189	95	307
5	193	95	356	148	144	2360	2070	1920	113	150	213	270
6	183	109	345	142	142	2220	1840	1610	106	133	364	216
7	170	109	327	133	142	2040	1550	1290	127	113	270	182
8	167	101	262	130	142	1890	1260	1100	152	101	175	156
9	158	98	233	125	140	2020	1100	965	182	94	214	141
10	145	98	210	123	141	1980	968	855	232	89	360	130
11	141	95	231	120	141	1800	930	798	286	87	243	127
12	138	88	214	120	149	1700	2170	686	294	82	172	122
13	134	147	210	116	150	1740	2080	592	312	78	132	115
14	129	151	193	120	150	2110	1680	528	337	75	119	102
15	125	129	181	123	153	2120	1410	498	336	72	105	95
16	136	123	175	126	150	2000	1290	459	302	66	93	91
17	129	193	164	127	148	1960	1220	410	246	65	128	84
18	121	232	159	128	150	2080	1120	369	199	62	330	81
19	117	201	164	127	155	2930	993	334	163	61	650	74
20	117	189	183	130	157	3380	866	303	147	59	800	74
21	113	181	210	130	167	3280	742	272	135	60	730	78
22	110	164	199	129	180	3070	638	260	125	66	700	74
23	113	225	184	132	212	3100	555	246	114	68	790	68
24	106	230	190	134	250	3270	511	229	108	69	600	60
25	113	213	188	128	292	3200	496	214	98	82	510	54
26	122	207	160	128	300	2800	1040	204	92	77	390	51
27	113	215	145	129	310	2480	1050	202	88	72	370	78
28	108	212	142	132	321	2450	1270	187	91	97	346	78
29	103	198	170	136	---	2450	1510	160	241	98	400	68
30	99	189	220	139	---	2590	1880	153	242	97	435	60
31	99	---	180	140	---	2570	---	148	---	84	415	---
TOTAL	4379	4580	6595	4120	4945	68700	41469	23632	5399	3015	10382	4139
MEAN	141	153	213	133	177	2216	1382	762	180	97.3	335	138
MAX	248	232	364	160	321	3380	2380	2430	337	193	800	398
MIN	99	88	142	116	135	340	496	148	88	59	73	51
CFSM	.39	.43	.59	.37	.49	6.16	3.84	2.12	.50	.27	.93	.38
IN.	.45	.47	.68	.43	.51	7.10	4.29	2.44	.56	.31	1.07	.43

CAL YR 1978 TOTAL 135782 MEAN 372 MAX 1830 MIN 41 CFSM 1.03 IN 14.03
WTR YR 1979 TOTAL 181355 MEAN 497 MAX 3380 MIN 51 CFSM 1.38 IN 18.74

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
04...	0915	80010	--	197	--	--	11.0	15.5	--
04...	1000	17002	17002	197	1010	8.0	14.0	16.0	7.4
NOV									
06...	1100	17002	17002	117	1220	8.1	7.0	11.5	8.6
06...	1200	17002	17002	117	1210	8.2	8.0	11.5	8.6
16...	1255	80010	--	119	--	--	4.5	6.0	--
29...	1400	17002	17002	202	1120	7.9	1.5	2.0	11.3
DEC									
14...	1300	17002	17002	191	1260	--	1.0	.5	14.6
14...	1400	17002	17002	191	1250	--	.5	.5	14.7
19...	1145	80010	--	164	--	--	1.0	1.0	--
JAN									
31...	1300	17002	17002	--	1280	7.5	-4.0	.0	12.6
FEB									
07...	1100	80010	--	143	--	--	-14.0	.0	--
MAR									
20...	1110	80010	--	3220	--	--	9.0	6.5	--
23...	1500	80010	--	3040	--	--	11.0	8.0	--
27...	1200	17002	17002	2450	590	7.6	2.0	3.5	9.8
APR									
10...	0800	17002	17002	986	730	7.6	4.5	4.0	12.0
10...	0900	17002	17002	986	740	7.6	4.5	4.0	12.0
30...	1000	17002	17002	1870	640	7.8	4.5	8.0	10.0
MAY									
02...	1530	80010	--	1970	--	--	19.5	11.0	--
22...	1200	17002	17002	261	--	7.8	18.5	18.0	6.8
JUN									
12...	1405	80010	--	293	--	--	18.0	20.5	--
JUL									
02...	1000	17002	17002	186	850	7.8	22.0	18.5	6.8
26...	1545	80010	--	75	--	--	22.5	25.5	--
AUG									
02...	1200	17002	17002	74	1100	8.2	26.5	24.0	10.9
SEP									
11...	1345	80010	--	130	--	--	25.0	23.0	--
26...	1400	17002	17002	51	1400	8.4	25.0	22.0	15.5

05529000 DES PLAINES RIVER NEAR DES PLAINES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	DXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	CDLI- FORM, FECAL, 0.45 UM-MF (CDLS./ 100 ML) (31616)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT										
04...	32	270	130	78	--	--	3.9	.24	--	--
NOV										
06...	36	2000	165	115	--	--	4.9	.47	--	--
06...	40	--	170	115	--	--	5.9	.46	--	--
29...	20	910	150	120	--	--	3.5	.96	--	--
DEC										
14...	32	100	150	140	--	--	4.2	.85	--	--
14...	28	220	150	140	--	--	4.3	.85	.56	--
JAN										
31...	23	3400	150	138	--	--	3.2	1.9	--	--
MAR										
27...	59	390	61	42	18	10	3.2	.20	--	--
APR										
10...	20	91	90	56	18	7	3.4	.51	--	--
10...	16	<100	93	55	19	8	4.2	.54	--	--
30...	36	1300	66	42	120	16	2.2	.16	--	--
MAY										
22...	28	350	140	82	60	20	2.9	.51	--	0
JUL										
02...	35	--	135	83	130	34	3.1	.19	--	--
AUG										
02...	36	540	185	110	81	16	5.7	.15	--	--
SEP										
26...	39	91	165	130	59	15	6.6	.02	--	--

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)
OCT									
04...	--	--	--	0	--	--	--	--	1
NOV									
06...	--	--	--	10	--	.0	--	--	2
06...	--	--	--	20	--	--	--	--	1
29...	--	--	0	0	80	--	0	--	0
DEC									
14...	--	--	0	10	90	--	0	--	0
14...	--	--	0	0	100	--	100	--	1
JAN									
31...	--	0	0	0	--	.0	--	--	1
MAR									
27...	--	--	--	40	--	.0	--	--	0
APR									
10...	--	--	--	0	--	--	--	--	1
10...	--	--	--	0	--	--	--	--	1
30...	--	--	--	0	--	--	--	--	1
MAY									
22...	0	0	0	0	230	.0	0	.00	0
JUL									
02...	--	--	--	0	--	--	--	--	1
AUG									
02...	--	--	--	0	--	.0	--	--	0
SEP									
26...	--	--	--	0	--	--	--	--	0

05529500 MC DONALD CREEK NEAR MOUNT PROSPECT, IL

LOCATION.--Lat 42°05'43", long 87°54'46", in SW¼SE¼ sec.23, T.42 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Camp McDonald Road, 2.5 mi (4.0 km) northeast of Mount Prospect, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--7.93 mi^2 (20.54 km^2).

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WSP 1915: 1958. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.12 ft (194.499 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to May 9, 1978, at site 55 ft (17 m) downstream at same datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Dec. 26 to Feb. 23, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--27 years, 5.77 ft^3/s (0.163 m^3/s), 9.88 in/yr (251 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 664 ft^3/s (18.8 m^3/s) June 20, 1972, gage height, 7.58 ft (2.310 m); maximum gage height, 8.04 ft (2.451 m) July 13, 1975; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft^3/s (4.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 29	2330	176	4.98	5.83	1.777	Apr. 12	0745	*246	6.97	*6.55	1.996

No flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	.70	4.5	2.6	2.4	9.0	21	13	.86	4.8	.44	1.4
2	1.7	.70	3.9	2.4	2.2	12	45	11	.78	1.0	.28	1.1
3	2.2	.70	10	2.0	2.1	21	19	88	.67	.64	1.4	.78
4	2.0	.70	8.8	2.1	2.0	88	13	25	.56	.58	.95	.62
5	2.1	.70	5.3	2.0	1.9	88	10	16	.44	.41	2.2	.47
6	2.0	2.1	4.5	1.9	1.9	46	6.5	11	.45	.25	12	.38
7	1.3	2.4	4.0	1.9	2.0	43	6.3	8.2	3.2	.22	.96	.27
8	1.1	1.6	3.5	1.9	1.9	45	7.1	6.8	4.3	.10	.34	.17
9	1.1	1.1	3.1	1.7	1.8	51	7.0	5.7	7.0	.19	17	.16
10	.90	.90	2.4	1.8	1.8	20	5.6	5.1	6.8	.26	40	.13
11	.85	.70	3.4	1.8	1.7	15	16	12	2.7	.20	9.1	.07
12	.80	.60	3.2	1.7	1.7	13	137	6.0	1.4	.14	2.5	.06
13	.90	11	3.7	1.7	1.7	36	32	4.5	1.2	.12	1.6	.09
14	.80	5.7	5.2	2.0	1.7	44	18	4.1	.98	.11	1.2	.06
15	.75	2.0	3.0	2.1	1.6	9.8	12	4.9	.78	.07	.83	.06
16	3.5	1.4	2.9	1.9	1.5	13	9.3	3.5	.57	.02	.65	.02
17	3.0	16	2.8	1.8	1.5	26	7.6	2.8	.35	.02	6.7	.01
18	1.4	6.7	2.4	1.7	1.7	61	6.2	2.6	.72	.02	35	.01
19	.93	3.4	2.5	1.8	1.8	108	5.3	2.5	.78	.05	5.7	.00
20	.80	2.8	3.8	1.9	2.3	46	4.8	2.0	.63	.07	17	.00
21	.78	2.3	5.5	2.0	3.4	25	4.3	1.6	.43	.07	5.6	.00
22	.62	1.8	3.4	1.9	6.0	18	3.8	1.5	.24	.07	5.3	.00
23	1.3	13	2.9	2.0	12	18	3.6	1.4	.20	.05	4.6	.00
24	1.6	4.4	2.7	2.2	11	28	4.3	1.4	.22	.05	2.7	.00
25	1.9	3.0	3.1	2.0	9.6	11	5.2	1.3	.18	.77	1.9	.00
26	3.7	2.5	1.8	2.0	8.9	8.0	56	1.3	.13	.56	1.4	.00
27	2.2	2.8	1.7	2.0	8.2	7.0	23	1.3	.10	.28	1.6	.01
28	1.6	3.8	1.6	2.1	7.8	12	27	1.2	.06	4.2	1.7	.01
29	1.1	2.8	2.2	2.1	---	67	20	1.1	14	1.6	15	.01
30	1.0	3.2	3.0	2.1	---	89	28	1.0	8.2	4.4	4.6	.00
31	.80	---	2.7	2.2	---	44	---	1.1	---	2.7	1.9	---
TOTAL	47.33	101.50	113.5	61.3	104.1	1121.8	563.9	248.9	58.93	24.02	202.15	5.89
MEAN	1.53	3.38	3.66	1.98	3.72	36.2	18.8	8.03	1.96	.77	6.52	.20
MAX	3.7	16	10	2.6	12	108	137	88	14	4.8	40	1.4
MIN	.62	.60	1.6	1.7	1.5	7.0	3.6	1.0	.06	.02	.28	.00
CFSM	.19	.43	.46	.25	.47	4.57	2.37	1.01	.25	.10	.82	.03
IN.	.22	.48	.53	.29	.49	5.26	2.64	1.17	.28	.11	.95	.03

CAL YR 1978 TOTAL 2149.13 MEAN 5.89 MAX 134 MIN .00 CFSM .74 IN 10.08
WTR YR 1979 TOTAL 2653.32 MEAN 7.27 MAX 137 MIN .00 CFSM .92 IN 12.45

05530000 WELLER CREEK AT DES PLAINES, IL

LOCATION.--Lat 42°02'58", long 87°55'05", in NW¼NW¼ sec.18, T.41 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank 10 ft (3 m) upstream from bridge on State Highway 58 (Golf Road) in Des Plaines, 2 mi (3 km) west of U.S. Highway 45, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--13.2 mi^2 (34.2 km^2).

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 1915: 1957-60. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 634.02 ft (193.249 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to Sept. 9, 1968, at site 90 ft (27 m) downstream and at datum 1.00 ft (0.305 m) higher. Sept. 9, 1968, to Sept. 10, 1970, at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records poor. Prior to Nov. 15, 1958, effluent from Arlington Heights sewage treatment plan entered Weller Creek above station. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--29 years, 11.0 ft^3/s (0.312 m^3/s), 11.32 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,590 ft^3/s (45.0 m^3/s) June 10, 1967, gage height, 15.09 ft (4.599 m), present datum; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (16 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0030	676	19.1	7.19	2.192	May 2	0015	777	22.0	7.36	2.243
Mar. 29	1345	586	16.6	5.81	1.771	Aug. 10	0315	593	16.8	5.86	1.786
Apr. 11	2230	*919	26.0	*8.59	2.618	Aug. 18	0100	550	15.6	5.55	1.692
Apr. 26	0245	607	17.2	5.97	1.820						

No flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.93	2.1	4.0	2.9	21	38	26	3.8	1.9	4.8	2.4
2	1.9	1.1	2.1	3.5	2.9	15	150	172	2.9	.93	4.0	2.0
3	2.9	1.1	26	3.2	2.6	168	42	159	2.0	.75	7.7	1.8
4	1.3	.93	9.0	3.0	2.4	460	22	47	1.7	2.1	4.8	1.5
5	1.7	.75	6.0	2.9	2.3	159	12	27	1.5	1.1	36	1.3
6	1.3	6.0	6.0	2.8	2.7	110	6.8	12	1.3	.75	17	1.1
7	1.1	1.3	5.6	2.8	2.6	96	5.2	7.7	30	.30	4.8	.94
8	.75	.93	5.2	2.7	2.3	118	6.4	7.7	4.8	.60	4.8	.83
9	.75	.93	4.4	2.7	2.2	121	4.8	5.6	18	.93	84	.75
10	1.1	1.1	4.4	2.6	2.1	81	3.6	40	15	.75	165	.80
11	.93	1.1	4.0	2.6	2.1	42	145	10	1.5	1.3	11	.93
12	1.1	1.1	5.2	2.5	2.2	23	327	5.2	.75	.75	4.8	.75
13	1.1	46	5.6	2.7	2.5	108	97	4.8	.45	1.3	4.8	.64
14	1.1	2.9	4.4	2.5	2.8	90	38	10	.60	1.1	4.4	.92
15	.93	1.7	3.2	2.6	2.5	29	13	3.6	.30	1.5	4.0	.82
16	6.0	1.7	3.2	2.9	2.0	43	7.7	2.9	.60	1.5	4.4	.72
17	1.5	39	2.9	2.6	1.8	66	6.0	4.0	.93	1.7	60	.70
18	1.1	2.4	3.6	2.7	2.0	180	4.4	4.8	3.2	1.5	97	.75
19	.93	1.5	2.9	2.6	2.2	358	3.6	4.8	.15	1.9	8.6	.90
20	1.1	1.5	9.0	2.8	2.5	152	4.0	4.4	.15	1.3	54	1.1
21	.75	2.4	5.6	2.9	2.8	72	3.6	5.2	.00	1.9	8.2	1.4
22	.93	2.4	4.4	2.7	4.2	41	3.2	4.8	.00	2.9	19	.82
23	3.6	26	3.2	2.8	69	50	2.9	5.6	.00	2.4	6.8	.72
24	1.1	2.9	5.6	3.0	21	88	8.2	4.0	.00	5.2	4.8	1.2
25	4.4	2.1	3.6	2.8	13	29	5.6	5.3	.15	3.2	3.6	.77
26	2.6	1.9	2.9	2.7	9.0	17	209	2.7	.30	1.9	2.9	.69
27	1.1	4.8	2.4	2.5	6.0	10	104	2.4	.93	1.5	4.8	1.2
28	1.1	4.0	2.4	2.7	5.2	20	52	3.7	1.7	9.0	2.4	1.0
29	.93	3.2	4.0	3.2	---	216	96	2.9	107	1.9	69	.88
30	.93	2.4	17	2.4	---	236	46	2.2	4.8	40	4.0	.78
31	.93	---	7.2	2.6	---	105	---	2.9	---	6.4	3.0	---
TOTAL	48.66	166.07	173.1	87.0	177.8	3324	1467.0	600.2	204.51	100.26	714.4	31.11
MEAN	1.57	5.54	5.58	2.81	6.35	107	48.9	19.4	6.82	3.23	23.0	1.04
MAX	6.0	46	26	4.0	69	460	327	172	107	40	165	2.4
MIN	.75	.75	2.1	2.4	1.8	10	2.9	2.2	.00	.30	2.4	.64
CFSM	.12	.42	.42	.21	.48	8.11	3.71	1.47	.52	.25	1.74	.08
IN.	.14	.47	.49	.25	.50	9.37	4.13	1.69	.58	.28	2.01	.09

CAL YR 1978 TOTAL 3748.37 MEAN 10.3 MAX 237 MIN .73 CFSM .78 IN 10.56
WTR YR 1979 TOTAL 7094.11 MEAN 19.4 MAX 460 MIN .00 CFSM 1.47 IN 19.99

05530590 DES PLAINES RIVER NEAR SCHILLER PARK, IL

LOCATION.--Lat 41°57'11", long 87°51'15", in SE¼ sec.15, T.40 N., R.12 E., Cook County, Hydrologic Unit 07120004, at bridge on State Highway 19 (Irving Park Road), 0.3 mi (0.5 km) east of Schiller Park, 0.8 mi (1.3 km) downstream from Crystal Creek, 3.0 mi (4.8 km) downstream from Will Creek, and at mile 56.9 (91.6 km).

DRAINAGE AREA.--444 mi^2 (1,150 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1967-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
05...	1200	17002	17002	184	980	7.8	14.0	16.0	6.7	44
11...	1430	80010	--	150	--	--	17.5	14.5	--	--
NOV										
16...	1415	80010	--	122	--	--	5.5	6.0	--	--
DEC										
07...	1400	17002	17002	--	1420	--	.0	.0	9.2	52
07...	1500	17002	17002	285	--	--	-3.5	.0	9.1	44
19...	1325	80010	--	192	--	--	.5	.0	--	--
FEB										
07...	1350	80010	--	157	--	--	-10.0	.0	--	--
28...	1500	17002	17002	--	1480	7.9	2.0	.0	9.8	120
MAR										
30...	0900	17002	17002	3270	590	--	15.0	8.0	10.4	40
APR										
10...	1000	17002	17002	1140	730	7.6	4.5	4.5	11.8	28
10...	1100	17002	17002	--	760	7.8	4.5	4.0	11.8	24
19...	1100	17002	17002	1160	790	7.8	15.5	11.0	8.0	12
MAY										
03...	1550	80010	--	2080	--	--	15.0	12.0	--	--
09...	1300	17002	17002	1610	790	7.9	30.0	20.0	6.6	32
JUN										
04...	0800	17002	17002	147	1120	8.1	18.0	21.0	4.0	40
12...	1535	80010	--	292	--	--	17.5	21.0	--	--
JUL										
02...	1400	17002	17002	210	900	7.6	24.5	20.0	5.0	43
27...	1300	80010	--	87	--	--	29.5	23.0	--	--
AUG										
02...	1400	17002	17002	--	1000	7.8	26.5	24.0	6.6	40
SEP										
11...	1545	80010	--	127	--	--	26.0	23.0	--	--
14...	1200	17002	17002	--	1050	8.1	16.5	19.0	7.6	32

05530590 DES PLAINES RIVER NEAR SCHILLER PARK, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
OCT										
05...	1000	140	83	--	--	4.1	.25	.66	--	--
DEC										
07...	--	130	200	--	--	2.4	1.4	.42	0	0
07...	--	140	215	--	--	2.7	1.2	.41	0	--
FEB										
28...	--	120	265	33	--	2.3	3.6	--	0	--
MAR										
30...	11000	63	60	47	27	6.0	.53	--	0	--
APR										
10...	1000	92	64	22	21	3.0	.67	--	0	--
10...	910	94	65	29	10	3.1	.74	--	0	--
19...	1100	82	55	64	9	2.8	.47	--	0	--
MAY										
09...	4800	93	53	69	13	4.3	.26	--	0	--
JUN										
04...	590	175	110	48	15	4.2	.06	--	7	--
JUL										
02...	--	--	--	--	--	4.5	.35	--	5	--
AUG										
02...	8100	155	110	42	4	3.0	.35	--	9	--
SEP										
14...	5900	160	105	4	--	4.6	.14	--	5	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
05...	--	--	--	--	20	--	--	--	--	3
DEC										
07...	0	0	20	400	10	90	.0	0	.00	3
07...	0	0	20	--	--	90	.0	0	.00	0
FEB										
28...	0	0	20	--	20	--	.0	--	--	2
MAR										
30...	0	0	30	--	50	--	.0	--	--	0
APR										
10...	0	0	0	--	0	--	.0	--	--	2
10...	0	0	0	--	0	--	.0	--	--	1
19...	0	0	20	--	0	--	.0	--	--	1
MAY										
09...	0	0	20	--	129	--	.1	--	--	0
JUN										
04...	0	0	0	--	0	--	.0	--	--	1
JUL										
02...	0	0	20	--	40	--	--	--	--	--
AUG										
02...	0	0	10	--	0	--	.0	--	--	0
SEP										
14...	0	0	20	--	0	--	.0	--	--	1

05530990 SALT CREEK AT ROLLING MEADOWS, IL

LOCATION.--Lat 42°03'37", long 88°00'59", in SW¼NW¼ sec.8, T.41 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Algonquin Road in Rolling Meadows, 0.25 mi (0.40 km) downstream from Arlington Heights Branch Salt Creek, and at mile 35.6 (57.3 km).

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

PERIOD OF RECORD.--October 1973 to current year. August 1950 to September 1971, October 1971 to September 1972 (annual maximum discharge and gage height only), October 1972 to September 1973 at site 0.9 mi (1.4 km) downstream, published as Salt Creek near Arlington Heights. Records may not be equivalent.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 686.40 ft (209.215 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--6 years, 29.8 ft^3/s (0.844 m^3/s), 13.27 in/yr (337 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 910 ft^3/s (25.8 m^3/s) Apr. 18, 1975, gage height, 10.82 ft (3.298 m); no flow Jan. 12 to Feb. 8, 1977, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1715	*755	21.4	*9.98	3.042	Apr. 11	2315	676	19.1	9.53	2.905
Mar. 19	1445	492	13.9	8.10	2.469	Apr. 26	0330	327	9.26	6.68	2.036
Mar. 29	2345	453	12.8	7.78	2.371	May 2	2400	456	12.9	7.80	2.377

Minimum daily discharge, 0.16 ft^3/s (0.005 m^3/s) July 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	2.0	9.0	16	12	53	129	71	7.0	15	3.6	11
2	9.6	2.0	12	14	12	70	189	88	5.2	7.0	2.0	7.6
3	12	1.9	37	13	12	156	122	304	4.7	4.7	29	5.5
4	8.6	1.9	51	12	11	660	87	111	3.0	5.4	5.7	4.5
5	8.9	2.1	42	12	11	522	78	68	2.3	2.2	13	3.6
6	7.2	7.4	34	11	11	289	60	51	1.4	1.1	48	2.5
7	5.9	4.6	27	11	10	206	51	42	8.9	.93	14	2.2
8	5.2	3.3	23	11	10	195	45	35	18	1.1	9.2	1.3
9	4.6	2.8	20	10	10	217	44	30	25	.78	99	1.0
10	4.2	2.4	17	10	9.8	159	43	26	30	.57	156	.78
11	3.8	2.2	15	9.7	9.7	109	118	50	15	.41	108	.78
12	3.4	2.0	16	9.2	9.4	87	464	29	9.2	.26	39	.76
13	3.2	42	17	10	9.4	135	185	22	5.4	.26	20	.61
14	2.8	28	16	10	9.4	200	90	25	4.0	.30	13	.75
15	2.6	13	14	9.8	9.5	117	64	24	2.7	.37	9.2	.77
16	13	7.9	14	9.7	9.6	99	55	18	1.6	.16	6.5	.71
17	5.7	52	15	10	9.6	120	53	14	1.0	.37	30	.71
18	3.5	46	12	11	9.8	225	46	11	4.9	.51	111	.75
19	2.8	25	13	10	10	468	36	11	3.2	.51	44	.87
20	2.5	15	20	12	11	346	33	9.9	2.9	.41	67	.98
21	2.1	12	21	11	13	191	29	8.6	2.2	.57	44	1.2
22	1.7	9.3	20	11	16	132	26	7.6	1.4	2.0	41	1.0
23	6.5	44	19	11	30	129	27	7.0	1.3	2.0	65	.67
24	3.3	35	17	12	43	169	29	7.9	1.1	1.1	30	.99
25	8.0	23	14	11	37	116	34	12	.93	3.8	17	.79
26	8.9	14	11	11	36	80	261	5.4	.78	.85	11	.77
27	5.0	16	9.4	11	38	74	155	5.4	.70	.37	14	1.2
28	3.7	19	8.1	12	42	84	122	6.2	.70	11	13	1.2
29	2.9	16	9.4	13	---	260	111	5.9	55	4.0	62	1.2
30	2.2	15	28	12	---	350	118	4.9	30	16	34	1.1
31	2.2	---	19	12	---	236	---	5.7	---	8.9	17	---
TOTAL	168.0	466.8	599.9	348.4	461.2	6254	2904	1116.5	249.51	92.93	1175.2	57.79
MEAN	5.42	15.6	19.4	11.2	16.5	202	96.8	36.0	8.32	3.00	37.9	1.93
MAX	13	52	51	16	43	660	464	304	55	16	156	11
MIN	1.7	1.9	8.1	9.2	9.4	53	26	4.9	.70	.16	2.0	.61
CFSM	.18	.51	.64	.37	.54	6.62	3.17	1.18	.27	.10	1.24	.06
IN.	.20	.57	.73	.42	.56	7.63	3.54	1.36	.30	.11	1.43	.07

CAL YR 1978 TOTAL 12004.16 MEAN 32.9 MAX 525 MIN .96 CFSM 1.08 IN 14.64
WTR YR 1979 TOTAL 13894.23 MEAN 38.1 MAX 660 MIN .16 CFSM 1.25 IN 16.95

05531500 SALT CREEK AT WESTERN SPRINGS, IL

LOCATION.--Lat 41°49'35", long 87°54'00", in NE¼SE¼ sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Wolf Road, in Cook County Forest Preserve, 0.5 mi (0.8 km) north of Western Springs, and at mile 8.8 (14.2 km).

DRAINAGE AREA.--114 mi^2 (295 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WSP 1915: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.93 ft (190.479 m) National Geodetic Vertical Datum of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Occasional regulation by dam above station.

AVERAGE DISCHARGE.--34 years, 104 ft^3/s (2.945 m^3/s), 12.39 in/yr (315 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft^3/s (54.7 m^3/s) Mar. 4, 1979, gage height, 8.48 ft (2.585 m); maximum gage height, 8.55 ft (2.606 m) Aug. 28, 1972; minimum discharge, 0.4 ft^3/s (0.011 m^3/s) July 13, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft^3/s (31 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1445	*1930	54.7	*8.48	2.585	May 3	0500	1330	37.7	7.31	2.228
Mar. 20	1600	1260	35.7	7.16	2.182	Aug. 10	2200	1660	47.0	8.13	2.478
Mar. 31	0245	1130	32.0	6.86	2.091	Aug. 20	1400	1190	33.7	7.14	2.176
Apr. 12	0600	1480	41.9	7.63	2.326						

Minimum daily discharge, 35 ft^3/s (0.99 m^3/s) July 19, 22, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	45	84	118	69	200	947	453	57	125	58	117
2	69	43	80	96	71	300	782	361	51	91	48	94
3	77	41	127	90	75	500	714	1070	48	65	74	79
4	71	41	178	83	73	1800	581	955	47	67	62	70
5	71	41	170	78	71	1710	371	785	53	51	133	61
6	65	62	161	72	74	1700	282	414	59	43	482	62
7	60	65	138	67	72	1460	226	269	76	40	133	57
8	54	54	122	64	68	1120	227	204	111	36	92	53
9	50	50	106	62	65	1030	238	171	193	38	153	50
10	50	48	103	58	63	916	196	151	143	39	1060	49
11	49	46	100	56	62	727	277	227	129	40	1000	47
12	48	48	105	56	61	487	1290	190	106	40	512	48
13	45	104	111	60	60	460	1200	158	94	41	265	47
14	44	146	107	62	62	697	1010	134	86	43	156	46
15	43	110	104	61	60	697	590	132	72	42	103	44
16	52	87	103	60	60	555	331	118	56	44	85	44
17	56	124	100	65	60	458	242	106	50	42	216	44
18	52	153	96	65	60	584	205	94	108	37	754	47
19	49	147	102	68	65	1080	181	87	81	35	369	44
20	46	112	112	70	70	1240	160	83	63	38	853	48
21	44	93	138	74	80	1180	146	75	54	37	460	42
22	42	81	125	72	90	875	135	69	47	35	326	47
23	71	144	117	70	110	624	124	69	48	36	269	47
24	56	137	113	75	200	532	129	66	41	37	221	43
25	66	121	111	68	180	512	150	62	39	55	163	45
26	73	100	95	75	170	422	451	59	40	45	123	45
27	65	99	85	79	160	314	661	56	40	35	108	44
28	56	106	81	80	180	280	796	52	41	107	98	42
29	50	94	88	78	---	563	658	53	226	51	294	41
30	46	89	150	77	---	943	549	51	200	187	206	42
31	46	---	140	73	---	1110	---	53	---	105	158	---
TOTAL	1745	2631	3552	2232	2491	25076	13849	6827	2459	1727	9034	1589
MEAN	56.3	87.7	115	72.0	89.0	809	462	220	82.0	55.7	291	53.0
MAX	79	153	178	118	200	1800	1290	1070	226	187	1060	117
MIN	42	41	80	56	60	200	124	51	39	35	48	41
CFSM	.49	.77	1.01	.63	.78	7.10	4.05	1.93	.72	.49	2.55	.47
IN.	.57	.86	1.16	.73	.81	8.18	4.52	2.23	.80	.56	2.95	.52

CAL YR 1978 TOTAL 51736 MEAN 142 MAX 924 MIN 32 CFSM 1.25 IN 16.88
WTR YR 1979 TOTAL 73212 MEAN 201 MAX 1800 MIN 35 CFSM 1.76 IN 23.89

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
05...	0900	17002	17002	71	1200	7.4	12.0	16.0	5.3	40
12...	1030	80010	--	49	--	--	16.0	15.0	--	--
30...	1300	17002	17002	44	1500	8.2	17.0	12.0	8.4	40
30...	1400	17002	17002	44	1500	8.3	16.5	12.0	8.7	36
NOV										
07...	1145	80010	--	65	--	--	8.5	11.5	--	--
DEC										
08...	1300	17002	17002	119	1550	--	-9.0	.5	12.8	36
19...	1145	80010	--	95	--	--	1.0	4.5	--	--
JAN										
30...	1100	17002	17002	77	1520	7.9	-5.5	.0	11.9	38
30...	1150	80010	--	77	--	--	-6.0	.0	--	--
MAR										
05...	1200	17002	17002	1690	1230	--	-1.0	.0	11.8	43
07...	1250	80010	--	1480	--	--	3.5	2.5	--	--
12...	1400	80010	--	434	--	--	2.0	3.0	--	--
APR										
03...	1600	17002	17002	717	880	--	9.0	7.0	--	20
19...	0900	17002	17002	181	1080	8.1	13.0	10.0	9.1	24
24...	1010	80010	--	117	--	--	17.0	16.0	--	--
MAY										
09...	0900	17002	17002	171	1000	8.1	27.0	18.5	5.8	32
JUN										
06...	1220	80010	--	50	--	--	28.0	22.0	--	--
JUL										
09...	0900	17002	17002	39	1600	7.7	25.0	--	1.8	30
09...	1000	17002	17002	38	1600	7.6	25.0	--	--	39
17...	0915	80010	--	43	--	--	19.5	23.0	--	--
AUG										
03...	0700	17002	17002	66	1300	7.6	19.0	21.5	4.0	51
29...	1350	80010	--	426	--	--	26.0	22.0	--	--
SEP										
04...	1400	17002	17002	68	1300	7.8	24.5	24.0	5.2	35

05531500 SALT CREEK AT WESTERN SPRINGS, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
OCT										
05...	88000	155	185	--	--	4.3	2.8	1.6	--	--
30...	25000	160	230	--	--	6.5	2.7	2.3	--	--
30...	24000	165	230	--	--	6.7	2.6	2.2	--	--
DEC										
08...	4500	150	260	--	--	3.2	2.2	1.0	0	--
JAN										
30...	4900	180	365	--	--	4.6	4.2	2.0	--	--
MAR										
05...	6600	86	230	87	12	3.0	.52	.43	0	200
APR										
03...	--	98	100	50	6	1.8	.49	--	0	200
19...	3500	135	140	44	8	2.8	.91	--	0	400
MAY										
09...	2700	135	120	64	10	2.9	.88	--	0	300
JUL										
09...	1200	195	250	32	4	6.3	4.0	--	0	700
09...	--	195	250	20	1	6.3	4.0	--	0	700
AUG										
03...	12000	145	200	94	14	4.5	2.4	--	3	600
SEP										
04...	3400	150	160	34	12	5.0	.94	--	5	400

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT									
05...	--	--	--	20	--	--	--	--	3
30...	--	--	--	10	--	--	--	--	1
30...	--	--	--	10	60	.0	--	.00	2
DEC									
08...	--	--	20	10	50	.0	100	--	1
JAN									
30...	--	--	--	10	--	--	--	--	2
MAR									
05...	0	0	20	20	100	.0	0	.00	1
APR									
03...	0	0	30	20	--	.0	--	--	0
19...	0	0	20	0	--	.0	--	--	1
MAY									
09...	0	0	20	0	--	.0	--	--	1
JUL									
09...	0	10	10	0	--	.0	--	.01	0
09...	0	10	10	0	--	--	--	.01	--
AUG									
03...	0	0	20	0	--	.0	--	.00	1
SEP									
04...	0	0	10	0	--	.0	--	.00	0

05532000 ADDISON CREEK AT BELLWOOD, IL

LOCATION.--Lat 41°52'48", long 87°52'07", in SW¼SE¼ sec.9, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on right bank at downstream side of bridge on Washington Boulevard in Bellwood, 1,050 ft (320 m) upstream from Chicago Great Western Railway bridge and at mile 3.2 (5.1 km).

DRAINAGE AREA.--17.9 mi^2 (46.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1950 to June 1951, October 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952. WSP 1708: 1958, 1959(P). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 617.65 ft (188.260 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark). Prior to Oct. 26, 1951, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--28 years, 13.9 ft^3/s (0.394 m^3/s), 10.55 in/yr (268 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 706 ft^3/s (20.0 m^3/s) Sept. 17, 1972, gage height, 7.97 ft (2.429 m); maximum gage height, 9.48 ft (2.890 m) Oct. 11, 1954; no flow Sept. 14, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0330	543	15.4	6.91	2.106	Aug. 5	2045	447	12.7	6.52	1.987
Apr. 11	2245	577	16.3	7.17	2.185	Aug. 10	1600	506	14.3	7.00	2.134
May 3	0015	*591	16.7	*7.28	2.219	Aug. 18	0015	324	9.18	5.45	1.661

Minimum daily discharge, 2.5 ft^3/s (0.071 m^3/s) July 18, 21, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	10	9.4	20	7.4	34	33	30	4.7	10	6.8	8.6
2	4.7	5.5	10	14	7.2	40	65	71	4.5	6.1	4.7	7.0
3	14	5.3	36	10	7.2	116	31	226	3.8	5.3	17	8.7
4	5.5	4.7	32	9.0	7.0	401	23	61	3.8	9.8	7.1	6.8
5	8.6	4.7	22	8.2	6.8	116	21	36	5.3	5.0	72	6.6
6	5.5	16	13	8.2	6.5	63	16	30	3.6	5.0	81	4.7
7	5.0	7.1	10	8.8	7.0	65	16	19	19	3.8	23	4.2
8	4.0	5.3	9.8	8.4	6.8	82	19	14	35	3.6	14	4.4
9	3.8	5.3	9.3	7.8	6.6	94	19	12	33	3.8	38	4.4
10	4.0	4.5	9.0	7.5	6.4	63	15	11	25	3.0	261	3.6
11	3.8	5.0	8.2	7.2	6.4	74	64	32	18	2.8	83	3.8
12	3.8	5.0	9.1	8.4	6.5	69	227	21	9.8	3.2	39	3.6
13	4.2	30	12	9.3	6.7	93	84	15	6.4	4.5	22	3.6
14	4.5	21	13	8.6	7.2	61	57	11	5.8	4.2	19	3.7
15	4.5	8.6	8.6	7.8	7.7	45	28	12	5.0	3.6	11	3.5
16	17	6.8	9.0	7.6	6.1	28	25	10	4.0	3.6	7.8	3.2
17	9.8	23	17	8.5	5.5	36	21	9.4	3.2	2.8	73	3.2
18	17	12	9.0	8.2	6.4	47	12	7.8	32	2.5	109	3.0
19	6.8	7.8	9.0	8.4	7.0	129	11	9.4	9.0	3.4	33	3.0
20	5.5	8.2	19	8.9	7.8	85	9.8	7.8	5.5	3.2	158	3.1
21	5.5	13	26	9.8	9.4	42	9.0	7.1	5.3	2.5	57	3.0
22	6.1	7.1	13	8.4	15	33	7.8	5.8	4.0	4.0	53	2.5
23	28	25	10	7.4	35	39	7.8	6.8	3.2	6.1	34	2.6
24	8.2	13	10	8.1	32	46	12	6.8	2.7	6.4	21	3.2
25	27	14	11	7.7	24	32	22	5.6	3.6	14	11	3.2
26	19	7.4	9.3	6.8	22	25	85	5.6	3.8	6.1	8.6	2.9
27	6.4	13	9.2	7.0	27	18	58	5.8	3.0	5.0	10	3.2
28	5.5	15	7.1	8.0	30	21	51	4.5	4.0	23	8.6	3.1
29	5.3	11	14	9.7	---	80	43	4.2	98	7.4	63	3.5
30	4.7	21	53	7.8	---	110	36	4.2	32	69	18	2.8
31	4.7	---	27	7.4	---	64	---	4.0	---	23	11	---
TOTAL	258.2	335.3	464.0	272.9	330.6	2251	1128.4	705.8	396.0	255.7	1374.6	122.7
MEAN	8.33	11.2	15.0	8.80	11.8	72.6	37.6	22.8	13.2	8.25	44.3	4.09
MAX	28	30	53	20	35	401	227	226	98	69	261	8.7
MIN	3.8	4.5	7.1	6.8	5.5	18	7.8	4.0	2.7	2.5	4.7	2.5
CFSM	.47	.63	.84	.49	.66	4.06	2.10	1.27	.74	.46	2.48	.23
IN.	.54	.70	.96	.57	.69	4.68	2.34	1.47	.82	.53	2.86	.25

CAL YR 1978 TOTAL 6010.3 MEAN 16.5 MAX 234 MIN 3.8 CFSM .92 IN 12.49
WTR YR 1979 TOTAL 7895.2 MEAN 21.6 MAX 401 MIN 2.5 CFSM 1.21 IN 16.41

05532000 ADDISON CREEK AT BELLWOOD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
12...	1445	80010	--	3.7	--	--	14.0	14.5	--	--
NOV										
07...	0745	80010	--	7.2	--	--	3.5	8.5	--	--
DEC										
20...	1210	80010	--	12	--	--	2.0	3.0	--	--
JAN										
30...	0740	80010	--	7.8	--	--	-8.0	.5	--	--
MAR										
15...	0745	80010	--	66	--	--	-12.0	.5	--	--
APR										
24...	1600	80010	--	15	--	--	18.0	15.5	--	--
JUN										
07...	0805	80010	--	4.2	--	--	25.5	21.0	--	--
18...	1400	17002	17002	32	800	8.2	17.0	18.5	5.1	43
JUL										
17...	1435	80010	--	2.5	--	--	21.5	24.0	--	--
18...	0800	17002	17002	2.8	1100	8.2	19.0	18.0	3.5	36
18...	0900	17002	17002	2.4	1100	8.4	20.0	19.0	3.6	32
AUG										
03...	0900	17002	17002	26	600	7.7	20.5	21.0	4.6	8
29...	0645	80010	--	109	--	--	18.5	20.5	--	--
SEP										
14...	1000	17002	17002	4.0	1200	7.7	15.5	16.0	6.8	20

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
JUN										
18...	3300	61	72	110	15	2.6	.45	1.7	0	300
JUL										
18...	5300	135	160	6	--	4.9	.05	1.1	5	--
18...	4200	140	165	2	--	5.0	.04	1.1	0	--
AUG										
03...	70000	68	92	93	15	4.2	.48	--	--	500
SEP										
14...	2300	140	155	1	--	7.7	.20	--	--	900

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
JUN										
18...	0	0	20	1700	0	100	.0	100	.00	3
JUL										
18...	0	0	10	--	0	10	--	0	--	3
18...	0	0	10	--	0	10	.0	0	.00	3
AUG										
03...	--	--	10	--	60	--	--	--	.00	2
SEP										
14...	--	--	10	--	0	--	--	--	.00	2

05532500 DES PLAINES RIVER AT RIVERSIDE, IL

LOCATION.--Lat 41°49'20", long 87°49'15", in SW¼SW¼ sec.36, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank 400 ft (122 m) downstream from bridge on Barry Point Road in Riverside, 500 ft (152 m) downstream from Hoffman Dam, 4,000 ft (1,219 m) downstream from Salt Creek, and at mile 44.3 (71.3 km).

DRAINAGE AREA.--630 mi^2 (1,632 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1174: 1944, 1948. WSP 1308: 1944(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 594.68 ft (181.258 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 27, 1946, nonrecording gage at bridge 400 ft (122 m) upstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Mar. 3-5, which are poor. Occasional regulation by gates of Hoffman Dam. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--36 years, 448 ft^3/s (12.69 m^3/s), 9.66 in/yr (245 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,510 ft^3/s (184 m^3/s) Mar. 20, 1948, gage height, 8.28 ft (2.524 m); maximum gage height, 9.82 ft (2.993 m) Jan. 26, 1969, ice jam; no flow Aug. 22-24, 1962, and part of Sept. 5, 1968, Aug. 31, Oct. 7, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1914, 7,450 ft^3/s (211 m^3/s) Mar. 18, 1919, from information furnished by Metropolitan Sanitary District of Greater Chicago.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,870 ft^3/s (166 m^3/s) Mar. 5, gage height, 7.91 ft (2.411 m), from floodmarks; minimum daily, 110 ft^3/s (3.12 m^3/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	168	317	340	291	960	3980	2440	262	451	199	577
2	346	162	270	315	285	1200	3620	2500	249	339	162	519
3	385	165	598	290	274	2200	3420	4320	234	297	275	476
4	336	163	800	275	269	4750	3140	3990	217	326	227	432
5	315	160	707	260	260	5460	2780	3330	218	265	389	402
6	299	247	620	250	265	5030	2460	2560	201	215	1260	352
7	276	262	600	240	260	4610	2130	2010	434	195	595	297
8	253	183	420	235	250	4280	1890	1620	541	169	412	252
9	239	167	358	225	230	3740	1720	1330	658	161	751	221
10	228	165	362	220	220	2930	1420	1110	538	153	2430	207
11	215	162	370	211	230	2590	1470	1380	504	149	2260	197
12	209	159	395	200	235	2450	4080	1120	456	148	892	192
13	205	385	425	210	240	2410	4140	853	446	144	565	188
14	198	558	379	215	240	2960	3500	730	454	148	396	179
15	190	313	356	220	240	3050	2520	708	441	142	304	170
16	219	251	338	220	250	2840	1920	627	403	133	245	161
17	265	484	324	230	265	2670	1680	560	353	127	593	157
18	224	559	304	235	260	2770	1540	506	538	121	1960	153
19	201	442	316	240	280	3960	1350	468	341	117	1160	148
20	191	357	377	250	300	4770	1160	428	254	116	1820	144
21	188	319	540	265	305	4810	975	380	228	115	1550	144
22	181	286	426	270	325	4420	834	355	203	122	1270	136
23	310	600	372	275	450	4040	727	346	191	135	1200	136
24	223	507	362	280	650	3960	685	328	174	143	969	125
25	272	415	361	287	860	3970	737	311	163	245	840	125
26	356	355	294	277	820	3790	1810	297	156	161	658	114
27	253	381	231	274	800	3360	2230	282	153	131	564	110
28	208	441	270	289	840	2930	2380	274	148	345	528	125
29	188	367	280	302	---	3090	2240	266	1120	237	1180	125
30	174	367	485	291	---	4060	2390	257	874	707	817	121
31	170	---	400	291	---	4420	---	255	---	460	650	---
TOTAL	7731	9550	12657	7982	10194	108480	64928	35941	11152	6717	27121	6685
MEAN	249	318	408	257	364	3499	2164	1159	372	217	875	223
MAX	414	600	800	340	860	5460	4140	4320	1120	707	2430	577
MIN	170	159	231	200	220	960	685	255	148	115	162	110
CFSM	.40	.51	.65	.41	.58	5.55	3.44	1.84	.59	.34	1.39	.35
IN.	.46	.56	.75	.47	.60	6.41	3.83	2.12	.66	.40	1.60	.39

CAL YR 1978 TOTAL 225524 MEAN 618 MAX 3190 MIN 111 CFSM .98 IN 13.32
WTR YR 1979 TOTAL 309138 MEAN 847 MAX 5460 MIN 110 CFSM 1.34 IN 18.25

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: April to September 1979.

REMARKS.--Suspended sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 297 mg/L Apr. 12, 1979; minimum daily mean, 6 mg/L July 14, 15, 1979.
SEDIMENT LOADS: Maximum daily, 3,240 tons (2,940 metric tons) Apr. 12, 1979; minimum daily, 2.3 tons (2.1 metric tons) July 15, 1979.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 297 mg/L Apr. 12; minimum daily mean, 6 mg/L July 14, 15.
SEDIMENT LOADS: Maximum daily, 3,240 tons (2,940 metric tons) Apr. 12; minimum daily, 2.3 tons (2.1 metric tons) July 15.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), APRIL TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	3980	84	903	2440	70	461	262	12	8.5
2	3620	67	655	2500	91	636	249	12	8.1
3	3420	59	545	4320	205	2360	234	12	7.6
4	3140	53	449	3990	65	702	217	12	7.0
5	2780	48	360	3330	45	405	218	12	7.1
6	2460	43	286	2560	42	290	201	12	6.5
7	2130	38	219	2010	42	228	434	35	56
8	1890	40	204	1620	42	184	541	27	44
9	1720	32	149	1330	42	151	658	27	52
10	1420	25	96	1110	43	129	538	28	41
11	1470	34	165	1380	68	257	504	26	35
12	4080	297	3240	1120	59	178	456	17	21
13	4140	197	2200	853	47	108	446	18	22
14	3500	136	1290	730	39	77	454	20	25
15	2520	117	796	708	35	67	441	16	19
16	1920	116	601	627	25	42	403	13	14
17	1680	123	558	560	21	32	353	11	10
18	1540	124	516	506	19	26	538	38	62
19	1350	106	386	468	18	23	341	18	17
20	1160	83	260	428	18	21	254	13	8.9
21	975	63	166	380	18	18	228	11	6.8
22	834	50	113	355	18	17	203	13	7.1
23	727	45	88	346	17	16	191	20	10
24	685	41	76	328	17	15	174	13	6.1
25	737	37	74	311	17	14	163	12	5.3
26	1810	185	983	297	16	13	156	22	9.3
27	2230	108	645	282	16	12	153	24	9.9
28	2380	77	494	274	14	10	148	19	7.6
29	2240	55	333	266	11	7.9	1120	113	375
30	2390	63	407	257	11	7.6	874	32	82
31	---	---	---	255	11	7.6	---	---	---
TOTAL	64928	---	17257	35941	---	6515.1	11152	---	990.8

05532500 DES PLAINES RIVER AT RIVERSIDE, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), APRIL TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	451	27	33	199	10	5.4	577	62	97
2	339	16	15	162	8	3.5	519	56	78
3	297	12	9.6	275	18	14	476	50	64
4	326	13	11	227	12	7.5	432	46	54
5	265	11	7.9	389	44	134	402	42	46
6	215	8	4.6	1260	36	146	352	35	33
7	195	8	4.2	595	16	26	297	33	26
8	169	9	4.1	412	18	20	252	31	21
9	161	10	4.3	751	48	91	221	30	18
10	153	13	5.4	2430	253	1900	207	29	16
11	149	17	6.8	2260	165	1010	197	28	15
12	148	18	7.2	892	82	197	192	24	12
13	144	11	4.3	565	52	79	188	20	10
14	148	6	2.4	396	37	40	179	20	9.7
15	142	6	2.3	304	28	23	170	24	11
16	133	11	4.0	245	23	15	161	25	11
17	127	13	4.5	593	71	168	157	24	10
18	121	12	3.9	1960	213	1130	153	23	9.5
19	117	13	4.1	1160	178	567	148	21	8.4
20	116	17	5.3	1820	210	1060	144	20	7.8
21	115	26	8.1	1550	175	732	144	18	7.0
22	122	23	7.6	1270	170	594	136	18	6.6
23	135	20	7.3	1200	184	612	136	19	7.0
24	143	20	8.5	969	157	409	125	20	6.8
25	245	18	12	840	114	259	125	20	6.8
26	161	10	4.3	658	72	128	114	21	6.5
27	131	10	3.5	564	58	88	110	19	5.6
28	345	35	38	528	52	74	125	16	5.4
29	237	15	9.6	1180	127	430	125	13	4.4
30	707	53	146	817	88	194	121	16	5.2
31	460	32	40	650	68	119	---	---	---
TOTAL	6717	---	428.8	27121	---	10275.4	6685	---	618.7
YEAR	309138		36085.8						

05533000 FLAG CREEK NEAR WILLOW SPRINGS, IL

LOCATION.--Lat 41°44'20", long 87°53'48", in SE¼NE¼ sec.31, T.38 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on German Church Road, 1.1 mi (1.8 km) northwest of Willow Springs and at mile 2.2 (3.5 km).

DRAINAGE AREA.--16.5 mi^2 (42.7 km^2).

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 606.36 ft (184.819 m) National Geodetic Vertical Datum of 1929. Prior to June 17, 1963, water-stage recorder at same site at datum 3.73 ft (1.137 m) higher. June 17, 1963, to June 26, 1964, nonrecording gage at site 0.5 mi (0.8 km) upstream at datum 4.82 ft (1.469 m) higher.

REMARKS.--Records good. Dirunal fluctuation at low flow. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--28 years, 16.2 ft^3/s (0.459 m^3/s), 13.33 in/yr (339 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,680 ft^3/s (75.9 m^3/s) Sept. 14, 1961, gage height, 13.71 ft (4.179 m), present datum; minimum daily, 0.1 ft^3/s (0.003 m^3/s) Dec. 9, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft^3/s (9.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0700	841	23.8	7.71	2.350	May 3	0330	444	12.6	6.48	1.975
Mar. 19	0715	352	9.97	6.10	1.859	Aug. 5	2300	356	10.1	6.12	1.865
Mar. 29	1630	354	10.0	6.11	1.862	Aug. 10	1915	409	11.6	6.34	1.932
Apr. 12	0145	*967	27.4	*8.02	2.444	Aug. 18	0500	569	16.1	6.92	2.109

Minimum daily discharge, 6.8 ft^3/s (0.19 m^3/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	7.5	11	21	9.7	38	64	52	20	13	11	15
2	8.0	7.5	10	17	12	43	77	50	11	11	9.2	13
3	14	7.6	31	14	13	122	50	240	9.9	11	23	12
4	8.0	7.1	18	13	9.6	578	41	96	10	15	11	12
5	8.5	7.4	14	14	12	211	38	64	15	9.7	52	12
6	7.9	13	12	11	13	135	29	45	12	10	94	11
7	7.3	8.4	11	13	11	117	33	37	43	9.3	17	11
8	7.1	7.8	11	13	11	124	36	32	29	11	12	10
9	7.5	7.8	9.6	12	11	131	38	27	19	12	29	9.9
10	7.7	7.6	10	11	10	87	32	23	14	10	166	10
11	7.8	7.3	10	11	11	58	91	66	13	9.5	84	11
12	7.0	6.8	11	10	11	47	368	36	11	9.6	29	15
13	7.6	17	11	12	12	93	110	27	11	9.6	17	11
14	7.1	12	11	12	11	111	69	22	10	12	13	9.9
15	7.1	8.3	11	11	11	63	43	22	11	11	11	9.2
16	8.0	7.9	11	11	10	58	36	19	9.1	9.7	10	8.9
17	7.9	27	10	11	11	70	33	19	9.2	9.3	115	9.2
18	7.7	12	11	11	10	118	28	17	25	9.5	275	8.6
19	7.4	9.7	9.4	11	11	245	26	16	18	9.1	63	9.2
20	7.7	9.7	14	11	12	137	23	14	12	6.9	142	9.2
21	7.5	9.6	13	12	14	81	21	14	10	9.1	59	9.6
22	7.3	9.6	11	12	15	63	19	14	10	8.6	61	8.6
23	13	22	10	12	48	65	19	13	9.2	9.1	67	8.3
24	8.2	11	11	12	58	67	20	12	9.2	9.6	36	8.6
25	12	10	10	11	34	48	33	13	8.9	11	24	8.6
26	12	9.9	10	12	27	39	98	12	9.3	10	18	8.6
27	8.4	13	9.5	12	26	37	95	11	9.4	9.1	16	8.6
28	7.5	12	10	12	29	38	119	11	9.3	24	15	8.0
29	7.3	11	12	12	---	153	95	11	42	9.7	68	7.4
30	7.8	10	58	12	---	146	81	11	19	84	30	9.9
31	7.5	---	26	12	---	98	---	12	---	17	20	---
TOTAL	258.1	317.5	427.5	381	473.3	3421	1865	1058	448.5	409.4	1597.2	303.3
MEAN	8.33	10.6	13.8	12.3	16.9	110	62.2	34.1	15.0	13.2	51.5	10.1
MAX	14	27	58	21	58	578	368	240	43	84	275	15
MIN	7.0	6.8	9.4	10	9.6	37	19	11	8.9	6.9	9.2	7.4
CFSM	.51	.64	.84	.75	1.02	6.67	3.77	2.07	.91	.80	3.12	.61
IN.	.58	.72	.96	.86	1.07	7.71	4.20	2.39	1.01	.92	3.60	.68

CAL YR 1978 TOTAL 7022.4 MEAN 19.2 MAX 230 MIN 6.8 CFSM 1.16 IN 15.83
WTR YR 1979 TOTAL 10959.8 MEAN 30.0 MAX 578 MIN 6.8 CFSM 1.82 IN 24.71

05534050 DES PLAINES RIVER AT LOCKPORT, IL

LOCATION.--Lat 41°35'47", long 88°04'07", in NE¼ sec.22, T.36 N., R.10 E., Will County, Hydrologic Unit 07120004, at bridge on Division Street, 0.3 mi (0.5 km) upstream from bridge on State Highway 7 (Ninth Street in Lockport), 0.6 mi (1.0 km) northwest of Lockport, 4.0 mi (6.4 km) upstream from Chicago Sanitary and Ship Canal, and at mile 20.1 (32.3 km).

DRAINAGE AREA.--700 mi^2 (1,813 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site G 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
04...	1000	80010	--	393	--	--	13.0	15.0	--	--
30...	1200	17002	17002	190	980	8.8	16.5	--	17.2	40
31...	1400	80010	--	218	--	--	14.0	12.0	--	--
NOV										
30...	0900	17002	17002	400	1400	--	-7.0	.0	--	36
DEC										
19...	1000	80010	--	241	--	--	1.0	1.5	--	--
22...	0800	17002	17002	640	1600	8.1	-2.0	.0	13.9	--
22...	0900	17002	17002	720	1530	8.0	-.5	.0	14.2	--
FEB										
06...	1400	17002	17002	--	1520	8.1	-6.5	.0	8.9	20
MAR										
01...	0800	17002	17002	690	1480	8.3	1.5	.0	7.9	52
07...	1230	80010	--	4970	--	--	1.5	2.0	--	--
26...	1100	17002	17002	3480	650	6.7	.0	4.0	12.2	28
APR										
11...	0800	17002	17002	1370	840	--	5.0	4.5	12.2	28
25...	1245	80010	--	707	--	--	24.0	14.5	--	--
MAY										
10...	0800	17002	17002	1310	780	8.4	24.5	20.0	6.4	36
31...	1110	80010	--	428	--	--	26.0	20.0	--	--
JUN										
05...	1100	17002	17002	336	--	--	28.0	21.5	--	64
JUL										
10...	1100	17002	17002	219	1200	7.6	29.5	26.5	13.2	67
10...	1200	17002	17002	219	--	--	--	26.5	--	59
AUG										
15...	1100	17002	17002	578	750	7.8	17.0	19.0	6.4	32
21...	1550	80010	--	2100	--	--	28.0	22.5	--	--
SEP										
13...	1400	17002	17002	270	1100	8.5	22.0	23.0	11.3	32

05534050 DES PLAINES RIVER AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
OCT									
30...	270	155	150	--	--	4.8	.02	--	--
NOV									
30...	--	150	195	--	--	3.3	1.1	.74	--
DEC									
22...	480	170	245	--	--	--	--	--	--
22...	210	165	235	--	--	--	--	--	--
FEB									
06...	--	175	250	--	--	3.6	3.1	--	--
MAR									
01...	3100	135	340	27	4	2.4	2.1	--	300
26...	--	67	67	26	11	2.2	.32	--	--
APR									
11...	--	105	100	24	6	2.8	.63	--	--
MAY									
10...	130	110	68	44	9	2.3	.06	--	--
JUN									
05...	--	175	150	100	21	2.7	.08	--	--
JUL									
10...	140	145	140	95	27	4.0	.05	--	--
10...	180	145	140	86	26	3.8	.05	--	--
AUG									
15...	540	110	94	86	22	2.0	.16	--	--
SEP									
13...	120	150	130	37	11	3.4	.02	--	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
30...	--	--	--	20	--	--	--	--	1
NOV									
30...	--	--	30	10	60	.0	0	.00	1
DEC									
22...	0	0	20	10	--	--	--	--	1
22...	0	0	20	20	--	.0	--	.00	1
FEB									
06...	--	0	20	0	--	.0	0	--	2
MAR									
01...	--	0	0	0	--	.0	0	--	1
26...	--	--	--	40	--	.0	--	.00	0
APR									
11...	0	0	20	0	--	.0	--	--	--
MAY									
10...	--	--	--	0	--	--	--	--	1
JUN									
05...	0	0	0	0	--	.0	--	.00	3
JUL									
10...	--	--	--	0	--	.0	--	.00	1
10...	--	--	--	0	--	.0	--	.00	1
AUG									
15...	--	--	--	0	--	--	--	--	4
SEP									
13...	--	--	--	0	--	--	--	--	5

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL

LOCATION.--Lat 42°09'10", long 87°49'07", in SW¼SE¼ sec.34, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on Lake-Cook Road, 1.7 mi (2.7 km) southeast of Deerfield, 5.7 mi (9.2 km) upstream from Skokie River, and at mile 64.7 (104.1 km).

DRAINAGE AREA.--19.7 mi^2 (51.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1952 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.88 ft (194.731 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Water-discharge records fair except those for winter periods and those for period of no gage-height record, Apr. 8-18, which are poor.

AVERAGE DISCHARGE.--27 years, 14.1 ft^3/s (0.399 m^3/s), 9.72 in/yr (247 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 550 ft^3/s (15.6 m^3/s) Mar. 5, 1976, gage height, 9.72 ft (2.963 m); maximum gage height, 10.34 ft (3.152 m) June 20, 1972; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1115	350	9.91	[a]*9.63	2.935	Apr. 12	unknown	*358	10.1	9.42	2.871
Mar. 14	0100	213	6.03	8.13	2.478	Apr. 26	unknown	292	8.27	8.88	2.707
Mar. 20	0030	331	9.37	9.21	2.807	May 3	0315	245	6.94	8.45	2.576
Mar. 29	2315	284	8.04	8.81	2.685						

[a]Ice jam

Minimum discharge, 0.70 ft^3/s (0.020 m^3/s) June 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	1.3	15	9.4	9.2	32	122	45	.98	8.6	1.6	13
2	1.6	1.3	6.4	8.2	8.0	30	130	42	.96	2.4	1.6	7.7
3	2.9	1.3	31	7.3	7.7	64	99	197	.94	1.8	2.6	3.7
4	2.3	1.3	26	6.6	7.4	330	68	101	.80	1.6	2.1	2.2
5	2.0	1.3	20	6.6	7.3	300	51	64	.88	1.3	17	1.9
6	1.7	2.7	15	6.4	7.0	262	38	44	1.0	1.1	34	1.8
7	1.6	2.4	14	6.6	7.0	215	33	34	1.9	1.1	29	1.8
8	1.7	1.6	12	6.4	6.8	195	47	25	2.1	1.1	26	1.7
9	1.5	1.4	11	6.3	6.6	209	40	20	3.9	1.1	30	1.4
10	1.4	1.4	10	6.4	6.4	170	35	20	4.7	1.0	52	1.4
11	1.3	1.3	11	6.2	6.4	126	72	24	2.0	1.1	16	1.2
12	1.2	1.3	13	6.1	6.3	83	332	18	1.7	1.1	6.4	1.1
13	1.1	9.3	11	6.6	6.3	109	140	12	1.5	1.1	3.5	1.1
14	1.1	6.0	11	6.2	6.2	191	64	12	1.4	1.1	2.8	1.1
15	1.0	2.5	10	6.0	6.2	126	41	11	1.1	1.1	2.2	1.1
16	2.0	2.3	9.8	6.3	6.1	92	36	6.6	1.0	1.0	1.8	1.1
17	2.5	8.3	9.4	6.0	6.0	98	33	4.6	.94	.94	13	1.1
18	2.3	12	9.0	5.9	6.0	194	26	3.5	1.2	.94	79	1.1
19	1.5	7.4	8.5	6.4	6.2	320	20	2.8	1.0	.97	60	1.1
20	1.2	4.3	11	7.2	7.2	272	16	2.4	.91	1.0	76	1.0
21	1.1	3.4	13	6.8	12	174	13	2.0	.88	1.0	43	.97
22	1.0	2.9	12	6.3	25	126	10	1.7	.85	1.9	40	.94
23	1.8	15	10	7.8	45	94	9.0	1.6	.85	1.4	45	.91
24	1.5	15	9.0	6.9	40	95	13	1.4	.80	3.7	21	.88
25	2.1	9.7	8.4	7.6	35	86	21	1.3	.72	3.0	15	.85
26	2.8	6.4	7.6	7.6	32	82	235	1.2	.70	1.1	10	.83
27	2.1	6.4	7.0	7.8	35	69	135	1.1	.77	1.2	7.8	1.1
28	1.7	8.1	6.4	7.8	31	43	205	1.0	1.1	3.1	8.4	.77
29	1.5	6.9	6.4	7.8	---	145	130	1.0	20	1.9	31	.77
30	1.3	7.0	11	8.0	---	237	107	.99	21	3.5	27	.77
31	1.2	---	10	8.6	---	184	---	1.0	---	2.0	19	---
TOTAL	52.8	151.5	364.9	216.1	391.3	4753	2321.0	703.19	78.58	55.25	723.8	56.39
MEAN	1.70	5.05	11.8	6.97	14.0	153	77.4	22.7	2.62	1.78	23.3	1.88
MAX	2.9	15	31	9.4	45	330	332	197	21	8.6	79	13
MIN	1.0	1.3	6.4	5.9	6.0	30	9.0	.99	.70	.94	1.6	.77
CFSM	.09	.26	.60	.35	.71	7.77	3.93	1.15	.13	.09	1.18	.10
IN.	.10	.29	.69	.41	.74	8.97	4.38	1.33	.15	.10	1.37	.11

CAL YR 1978 TOTAL 5237.53 MEAN 14.3 MAX 210 MIN .29 CFSM .73 IN 9.89
WTR YR 1979 TOTAL 9867.81 MEAN 27.0 MAX 332 MIN .70 CFSM 1.37 IN 18.63

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HCCC 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
02...	1550	80010	--	--	1.6	--	--	21.5	18.5	--	--
04...	1400	17002	17002	--	2.3	950	7.4	14.5	15.0	5.6	32
NOV											
06...	1500	17002	17002	--	3.0	800	7.4	10.0	11.0	3.2	32
15...	1250	80010	--	--	2.5	--	--	5.5	5.0	--	--
29...	1100	17002	17002	--	3.0	1060	8.0	2.0	.0	11.3	20
29...	1200	17002	17002	--	3.0	1480	8.0	2.0	.0	11.5	28
DEC											
18...	1530	80010	--	--	8.8	--	--	3.0	.0	--	--
JAN											
31...	1000	17002	17002	8.6	--	1360	7.8	-4.5	.0	9.6	15
FEB											
06...	0945	80010	--	--	7.4	--	--	-18.0	.0	--	--
28...	1200	17002	17002	31	--	1360	6.8	2.0	.0	10.4	32
MAR											
20...	1615	80010	--	--	251	--	--	8.5	5.0	--	--
27...	1000	17002	17002	--	80	650	7.3	1.5	3.0	7.1	40
APR											
30...	1200	17002	17002	--	107	670	7.5	5.5	7.0	4.2	24
MAY											
02...	1230	80010	--	--	39	--	--	21.0	11.0	--	--
22...	0800	17002	17002	--	1.7	--	7.9	12.0	13.5	6.8	32
JUN											
07...	1200	17002	17002	--	1.1	--	--	21.5	26.5	4.3	120
12...	1115	80010	--	--	1.6	--	--	18.0	17.0	--	--
JUL											
02...	0900	17002	17002	--	2.6	900	--	--	18.0	3.5	35
02...	1000	17002	17002	--	2.6	900	7.5	21.0	18.0	3.4	31
26...	0920	80010	--	--	1.1	--	--	24.0	20.5	--	--
AUG											
02...	0800	17002	17002	--	1.6	700	7.5	20.5	19.5	2.4	24
SEP											
11...	0920	80010	--	--	1.2	--	--	21.5	19.0	--	--
19...	0900	17002	17002	--	1.1	850	7.8	15.0	15.0	5.7	28

05534500 NORTH BRANCH CHICAGO RIVER AT DEERFIELD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
OCT									
04...	820	100	100	--	--	1.2	.46	--	--
NOV									
06...	4400	82	75	--	--	.20	.11	--	--
29...	1600	110	225	--	--	1.1	.27	.17	--
29...	1900	115	245	--	--	1.1	.28	.17	--
JAN									
31...	3700	140	177	--	--	1.0	.42	--	--
FEB									
28...	--	100	215	--	--	1.7	.24	.15	--
MAR									
27...	560	88	85	23	9	1.5	.11	.10	--
APR									
30...	1100	62	73	38	2	1.2	.09	.14	--
MAY									
22...	3300	91	88	75	15	.50	.13	.16	--
JUN									
07...	5700	75	92	83	27	.70	--	.32	--
JUL									
02...	--	90	140	34	18	1.7	.25	.27	--
02...	--	91	140	--	--	1.9	.23	--	--
AUG									
02...	1300	62	88	6	--	.10	.91	.44	--
SEP									
19...	4300	140	110	85	11	.70	.24	.22	.12

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT								
04...	--	--	--	0	--	--	--	2
NOV								
06...	--	--	--	20	--	--	--	1
29...	--	--	0	20	60	.0	0	0
29...	--	--	0	10	60	.0	0	0
JAN								
31...	--	0	0	0	--	.0	--	1
FEB								
28...	--	--	--	0	--	.0	--	0
MAR								
27...	--	--	--	30	--	--	--	0
APR								
30...	--	--	--	0	--	--	--	0
MAY								
22...	--	--	--	0	--	--	--	0
JUN								
07...	--	--	--	100	--	--	--	2
JUL								
02...	0	--	10	0	--	--	--	0
02...	--	--	--	--	--	--	--	0
AUG								
02...	--	--	--	0	--	--	--	0
SEP								
19...	--	--	--	0	--	--	--	0

05535000 SKOKIE RIVER AT LAKE FOREST, IL

LOCATION.--Lat 42°13'57", long 87°50'41", in NW¼SW¼ sec.4, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on State Highway 60 at Lake Forest, and at mile 13.1 (21.1 km).

DRAINAGE AREA.--13.0 mi^2 (33.7 km^2).

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 648.75 ft (197.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--28 years, 11.9 ft^3/s (0.337 m^3/s), 12.43 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 367 ft^3/s (10.4 m^3/s) Aug. 23, 1972, gage height, 6.79 ft (2.070 m); maximum gage height, 7.36 ft (2.243 m) June 20, 1972; no flow for many days in 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft^3/s (3.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1015	214	6.06	5.67	1.728	Apr. 26	0545	211	5.98	5.62	1.713
Mar. 13	2100	148	4.19	4.68	1.426	Apr. 28	0315	147	4.16	4.67	1.423
Mar. 19	0700	208	5.89	5.59	1.704	May 3	0315	137	3.88	4.50	1.372
Mar. 29	1700	194	5.49	5.38	1.640	Aug. 17	2400	127	3.60	4.35	1.326
Apr. 12	0200	*274	7.76	*6.48	1.975						

Minimum daily discharge, 0.41 ft^3/s (0.012 m^3/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.2	5.6	6.2	5.6	22	53	36	2.0	8.7	1.0	5.2
2	3.8	3.2	4.6	5.8	4.9	25	76	28	1.7	4.1	.92	3.8
3	4.6	3.3	28	5.4	4.6	52	50	102	1.5	2.9	1.9	2.6
4	3.6	3.6	25	5.0	4.3	204	34	46	1.2	2.8	18	2.0
5	5.0	3.3	14	4.6	4.2	160	28	28	1.3	1.8	39	1.7
6	3.8	4.5	9.7	4.5	4.7	113	22	21	1.8	1.5	40	1.6
7	2.8	3.4	7.6	4.4	4.3	94	22	18	5.2	1.3	15	1.3
8	2.2	3.1	7.0	4.3	4.2	88	27	16	5.0	1.1	13	1.1
9	3.0	3.1	6.6	4.1	4.0	109	24	15	4.2	.88	19	1.0
10	3.5	3.1	6.2	4.0	4.1	84	19	14	6.5	.84	24	.92
11	3.0	2.8	5.4	3.9	4.0	60	42	16	2.8	1.1	10	.94
12	3.1	1.5	6.8	3.8	4.0	39	196	8.5	1.8	1.2	9.2	.93
13	3.4	8.4	6.4	3.7	4.1	71	86	6.6	1.5	1.1	8.9	.86
14	2.7	4.3	5.6	3.8	4.0	117	36	7.6	3.3	1.1	8.4	.82
15	2.0	3.0	5.4	4.3	4.3	69	24	9.3	3.2	.80	7.6	.62
16	6.4	2.8	5.2	3.8	4.0	48	20	7.0	2.5	.70	6.9	.53
17	3.4	12	4.2	3.8	3.8	60	18	6.1	2.5	.78	20	.50
18	2.8	6.7	4.6	3.7	3.8	124	16	4.9	4.4	.58	81	.54
19	2.8	3.8	5.5	3.9	3.9	193	15	4.6	2.6	.53	26	.53
20	2.8	3.3	9.5	4.3	4.5	129	13	4.2	3.4	.60	24	.53
21	2.6	3.4	11	4.2	9.5	75	7.6	3.8	2.1	.72	15	.58
22	1.9	3.1	8.2	4.1	16	52	6.4	4.0	1.4	1.6	14	.44
23	2.8	12	5.7	4.3	39	51	6.0	4.0	2.4	1.5	20	.42
24	4.8	7.2	5.4	4.7	33	48	7.3	3.3	2.9	1.0	12	.41
25	6.1	4.6	4.9	4.5	28	35	12	3.0	2.8	3.6	10	.44
26	3.4	3.8	4.5	4.6	23	27	139	2.6	3.0	.82	9.5	.60
27	2.7	5.4	4.4	4.7	20	26	76	2.3	2.7	1.2	17	.69
28	2.4	6.4	4.2	4.8	19	27	123	2.4	3.5	8.6	9.6	.79
29	1.7	5.8	5.8	4.8	---	101	76	2.8	39	2.0	30	.68
30	1.5	6.0	7.7	4.9	---	141	63	2.1	14	3.1	14	.66
31	2.9	---	6.8	5.1	---	108	---	2.0	---	1.5	9.2	---
TOTAL	99.7	140.1	243.0	138.0	272.8	2552	1337.3	431.1	132.2	60.05	534.12	33.73
MEAN	3.22	4.67	7.84	4.45	9.74	82.3	44.6	13.9	4.41	1.94	17.2	1.12
MAX	6.4	12	28	6.2	39	204	196	102	39	8.7	81	5.2
MIN	1.5	1.5	4.2	3.7	3.8	22	6.0	2.0	1.2	.53	.92	.41
CFSM	.25	.36	.60	.34	.75	6.33	3.43	1.07	.34	.15	1.32	.09
IN.	.29	.40	.70	.39	.78	7.30	3.83	1.23	.38	.17	1.53	.10

CAL YR 1978 TOTAL 4119.50 MEAN 11.3 MAX 123 MIN 1.3 CFSM .87 IN 11.79
WTR YR 1979 TOTAL 5974.10 MEAN 16.4 MAX 204 MIN .41 CFSM 1.26 IN 17.09

05535070 SKOKIE RIVER NEAR HIGHLAND PARK, IL

LOCATION.--Lat 42°09'34", long 87°47'52", in NW¼SE¼ sec.35, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Clavey Road in Highland Park, and at mile 7.3 (11.7 km).

DRAINAGE AREA.--21.1 mi^2 (54.6 km^2).

PERIOD OF RECORD.--August 1967 to current year.

REVISED RECORDS.--WSP 2115: 1968. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 622.83 ft (189.839 m) National Geodetic Vertical Datum of 1929 (city of Highland Park bench mark).

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--12 years, 22.6 ft^3/s (0.640 m^3/s), 14.55 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 570 ft^3/s (16.1 m^3/s) Aug. 26, 1972, gage height, 8.10 ft (2.469 m); minimum daily, 1.2 ft^3/s (0.034 m^3/s), July 17, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1938 reached a stage of 10.6 ft (3.23 m), discharge not determined, from information furnished by Highland Park City Engineer.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0745	*388	11.0	*7.38	2.249	Apr. 12	0600	383	10.8	7.35	2.240
Mar. 19	0600	322	9.12	7.00	2.134	May 3	0415	267	7.56	6.63	2.021
Mar. 29	2200	273	7.73	6.67	2.033						

Minimum daily discharge, 1.2 ft^3/s (0.034 m^3/s) July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	4.0	9.2	11	9.3	35	79	52	4.2	18	3.9	15
2	3.7	4.0	12	10	8.4	47	111	44	3.8	8.8	3.5	8.2
3	6.1	4.0	52	9.0	8.2	88	76	181	3.5	6.1	7.2	4.2
4	4.4	4.0	47	8.4	7.8	344	51	72	3.3	6.1	19	3.7
5	5.4	4.2	22	7.8	8.0	232	42	47	3.0	4.5	68	5.6
6	5.6	8.7	14	7.4	7.8	158	31	35	2.8	4.0	72	4.6
7	4.2	4.0	13	7.5	7.5	145	28	28	8.8	3.3	29	3.1
8	3.5	3.6	12	7.0	7.0	140	33	25	12	3.3	21	2.5
9	3.2	4.0	11	6.8	7.1	162	32	23	13	2.8	38	2.2
10	4.8	4.8	10	6.7	7.2	120	25	21	11	2.4	73	1.8
11	4.2	2.8	11	6.4	7.0	83	61	33	6.4	3.0	21	1.7
12	3.8	2.4	14	6.2	6.8	63	299	17	3.8	3.0	16	1.7
13	3.6	24	14	6.2	6.8	111	132	13	3.3	2.6	16	1.8
14	3.6	8.1	11	6.5	6.8	162	64	14	4.0	2.4	17	1.8
15	3.2	3.8	10	7.2	7.2	93	42	14	4.8	2.0	16	1.7
16	6.0	3.2	9.2	6.4	7.1	87	35	12	4.8	1.4	16	1.4
17	5.6	20	9.2	6.4	6.8	83	29	10	4.0	1.2	46	1.3
18	3.5	11	7.2	6.3	6.6	162	25	10	6.1	1.4	142	1.4
19	3.5	6.0	7.3	6.7	6.6	288	23	9.5	4.8	1.7	62	1.5
20	4.2	4.5	14	7.4	7.0	175	21	8.2	3.5	1.5	92	1.6
21	4.0	4.8	15	7.2	11	99	17	5.8	4.0	1.5	40	1.7
22	3.6	5.0	12	7.0	23	69	14	6.4	3.0	2.6	54	1.5
23	4.4	24	10	7.4	70	72	13	6.7	2.6	2.0	85	1.4
24	3.5	9.6	8.4	8.0	60	70	16	6.7	3.8	6.7	33	1.5
25	9.8	6.5	8.4	7.7	50	50	18	6.4	4.0	6.0	24	1.6
26	7.0	5.0	7.8	7.9	40	36	155	5.6	4.2	2.9	21	1.9
27	3.6	7.0	7.1	7.9	35	32	104	5.6	5.3	2.5	29	2.1
28	3.2	9.2	8.7	8.0	33	38	156	5.3	6.1	13	22	2.3
29	3.2	10	11	8.1	---	134	98	5.6	48	5.1	62	2.0
30	2.4	10	15	8.2	---	105	87	5.3	32	9.0	30	1.9
31	3.0	---	13	9.0	---	139	---	4.0	---	5.1	24	---
TOTAL	133.5	222.2	425.5	233.7	469.0	3692	1917	732.1	223.9	135.9	1202.6	84.7
MEAN	4.31	7.41	13.7	7.54	16.8	119	63.9	23.6	7.46	4.38	38.8	2.82
MAX	9.8	24	52	11	70	344	299	181	48	18	142	15
MIN	2.4	2.4	7.1	6.2	6.6	32	13	4.0	2.6	1.2	3.5	1.3
CFSM	.20	.35	.65	.36	.80	5.64	3.03	1.12	.35	.21	1.84	.13
IN.	.24	.39	.75	.41	.83	6.51	3.38	1.29	.39	.24	2.12	.15

CAL YR 1978 TOTAL 6675.8 MEAN 18.3 MAX 241 MIN 1.9 CFSM .87 IN 11.77
WTR YR 1979 TOTAL 9472.1 MEAN 26.0 MAX 344 MIN 1.2 CFSM 1.23 IN 16.70

05535500 WEST FORK OF NORTH BRANCH CHICAGO RIVER AT NORTHBROOK, IL

LOCATION.--Lat 42°08'18", long 87°50'04", in SW¼SE¼ sec.4, T.42 N., R.12 E., Cook County, Hydrologic Unit 07120003, on left bank at upstream side of bridge on State Highway 68 at Northbrook and at mile 7.9 (12.7 km).

DRAINAGE AREA.--11.5 mi^2 (29.8 km^2).

PERIOD OF RECORD.--August 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 637.98 ft (194.456 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good. Diurnal fluctuation at low flow. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--27 years, 12.1 ft^3/s (0.343 m^3/s), 14.29 in/yr (363 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 930 ft^3/s (26.3 m^3/s) July 13, 1957, gage height, 9.65 ft (2.941 m); no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0330	474	13.4	6.72	2.048	Apr. 26	0345	354	10.0	5.76	1.756
Mar. 19	0200	327	9.26	5.52	1.682	May 3	0115	413	11.7	6.25	1.905
Mar. 29	1500	412	11.7	6.24	1.902	Aug. 10	0215	354	10.0	5.76	1.756
Apr. 12	0015	*602	17.0	*7.63	2.326						

Minimum daily discharge, 3.2 ft^3/s (0.091 m^3/s) Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	4.3	6.0	13	11	36	33	26	4.3	15	4.7	4.0
2	5.1	4.3	6.7	12	9.9	39	74	34	4.1	8.5	4.8	3.5
3	6.2	4.3	45	12	9.9	108	34	175	3.8	7.5	10	3.5
4	5.0	4.2	30	10	9.0	376	23	38	3.9	6.9	4.8	3.4
5	5.6	4.0	16	9.3	9.6	191	19	20	3.9	5.4	29	3.4
6	4.8	12	14	8.7	9.3	113	15	13	3.9	5.3	13	3.6
7	4.5	4.7	11	7.9	8.7	83	14	11	17	5.3	5.8	3.6
8	4.3	4.2	10	7.9	8.2	95	15	9.2	11	11	5.2	3.4
9	5.4	4.0	8.7	7.2	7.6	106	18	8.2	14	4.8	27	3.2
10	6.5	4.0	7.6	7.2	7.9	59	15	7.4	14	3.8	76	3.4
11	6.2	4.0	7.9	7.2	7.4	34	73	24	5.6	4.0	8.4	3.7
12	6.0	4.0	9.3	6.5	7.4	26	297	8.7	5.0	4.0	5.2	3.5
13	5.4	32	9.3	7.2	7.4	89	55	7.1	4.5	4.0	4.8	3.8
14	4.0	7.6	7.9	7.4	7.4	100	28	11	4.2	4.1	4.8	3.7
15	4.3	5.4	7.9	11	7.4	40	20	7.9	4.7	3.6	4.3	3.8
16	10	4.8	7.9	7.4	7.4	37	16	6.4	4.6	3.8	4.2	3.7
17	5.4	24	6.9	7.6	7.4	52	15	6.0	4.6	3.7	29	3.8
18	5.0	8.4	7.2	7.4	7.2	135	13	5.6	6.0	3.5	56	3.8
19	4.8	5.8	8.4	7.6	7.4	230	12	5.6	5.1	3.5	9.6	3.8
20	4.5	5.2	13	8.7	7.6	86	12	4.9	5.6	3.5	53	3.7
21	4.5	6.0	9.6	8.7	13	43	12	4.8	5.7	3.4	11	4.0
22	4.3	5.0	9.0	8.2	14	31	11	4.6	5.6	9.5	32	3.7
23	6.9	29	8.2	8.4	49	38	11	4.6	5.6	4.2	23	3.7
24	4.5	8.2	9.6	9.3	48	55	13	4.4	5.0	9.1	7.4	3.4
25	8.4	6.5	8.2	9.0	36	29	13	4.2	6.8	10	6.0	3.4
26	6.7	5.6	7.4	9.0	30	20	168	5.9	5.5	4.1	5.2	3.4
27	4.7	8.2	6.7	9.6	29	19	67	4.1	8.9	3.9	7.4	3.6
28	4.5	7.4	6.2	9.6	28	26	87	4.0	10	15	5.6	3.5
29	4.0	7.6	7.4	9.9	---	171	55	4.2	83	5.0	38	3.5
30	4.2	6.5	22	9.9	---	150	54	4.2	25	16	7.9	3.3
31	4.2	---	14	11	---	68	---	4.2	---	5.2	5.7	---
TOTAL	166.1	241.2	349.0	275.8	412.1	2685	1292	478.2	290.9	196.6	508.8	107.9
MEAN	5.36	8.04	11.3	8.90	14.7	86.6	43.1	15.4	9.70	6.34	16.4	3.60
MAX	10	32	45	13	49	376	297	175	83	16	76	4.0
MIN	4.0	4.0	6.0	6.5	7.2	19	11	4.0	3.8	3.4	4.2	3.2
CFSM	.47	.70	.98	.77	1.28	7.53	3.75	1.34	.84	.55	1.43	.31
IN.	.54	.78	1.13	.89	1.33	8.68	4.18	1.55	.94	.64	1.65	.35

CAL YR 1978 TOTAL 6512.8 MEAN 17.8 MAX 270 MIN 2.9 CFSM 1.55 IN 21.07
WTR YR 1979 TOTAL 7003.6 MEAN 19.2 MAX 376 MIN 3.2 CFSM 1.67 IN 22.65

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL

LOCATION.--Lat 42°00'44", long 87°47'45", in SW¼SE¼ sec.30, T.41 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Touhy Avenue in Niles, 3.6 mi (5.8 km) downstream from West Fork of North Branch, 7.9 mi (12.7 km) upstream from North Shore Channel, and at mile 51.4 (82.7 km).

DRAINAGE AREA.--100 mi^2 (259 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1207, 1237).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 601.99 ft (183.487 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Occasional regulation at low flow.

AVERAGE DISCHARGE.--29 years, 88.3 ft^3/s (2.501 m^3/s), 11.99 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,210 ft^3/s (62.6 m^3/s) June 11, 1967, gage height, 9.83 ft (2.996 m); minimum daily, 0.1 ft^3/s (0.003 m^3/s) Sept. 30, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1300	*1150	32.6	*7.80	2.377	Apr. 12	0730	1030	29.2	7.32	2.231
Mar. 19	2200	1070	30.3	7.50	2.286	May 3	0045	962	27.2	7.05	2.149
Mar. 30	1730	920	26.1	6.87	2.094						

Minimum daily discharge, 20 ft^3/s (0.57 m^3/s) July 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	24	56	76	61	195	486	312	34	176	52	79
2	55	23	57	67	62	220	569	302	31	88	43	57
3	53	52	114	61	62	366	450	907	29	68	58	42
4	49	24	174	56	62	1080	315	600	28	58	60	37
5	44	26	140	52	60	936	262	306	26	42	60	33
6	41	59	116	50	59	842	218	224	28	32	199	32
7	38	39	101	49	58	752	194	190	93	28	147	29
8	35	31	86	48	56	681	191	164	84	26	135	27
9	32	29	76	48	54	750	188	159	78	35	245	24
10	33	27	70	47	53	661	176	147	136	27	466	23
11	35	26	66	47	54	459	285	204	62	24	187	22
12	37	26	67	48	56	339	971	155	49	24	117	23
13	29	85	73	50	58	412	750	119	44	25	95	25
14	26	78	67	51	58	710	428	122	40	26	63	24
15	25	49	63	50	57	558	302	120	36	27	54	22
16	35	40	61	50	55	416	272	99	33	24	52	22
17	31	89	58	49	54	486	281	84	31	22	121	22
18	35	74	55	48	54	594	238	76	51	20	383	23
19	37	58	57	51	56	976	180	76	26	20	227	23
20	25	49	83	56	58	988	148	58	35	23	303	23
21	51	46	90	58	60	796	131	56	26	24	223	23
22	29	46	76	56	80	578	123	52	27	27	234	24
23	39	119	70	56	160	477	114	53	29	38	330	24
24	31	80	70	60	270	443	126	63	29	40	174	24
25	49	63	65	59	230	374	116	51	29	69	134	24
26	46	55	58	58	205	302	471	40	31	41	104	24
27	38	59	56	61	190	284	484	36	33	31	103	24
28	29	66	55	66	175	254	470	34	40	147	74	24
29	26	61	60	65	---	470	428	33	412	52	197	23
30	25	61	100	63	---	884	433	33	231	130	113	22
31	25	---	88	61	---	764	---	34	---	66	89	---
TOTAL	1147	1564	2428	1717	2517	18047	9800	4909	1861	1480	4842	848
MEAN	37.0	52.1	78.3	55.4	89.9	582	327	158	62.0	47.7	156	28.3
MAX	64	119	174	76	270	1080	971	907	412	176	466	79
MIN	25	23	55	47	53	195	114	33	26	20	43	22
CFSM	.37	.52	.78	.55	.90	5.82	3.27	1.58	.62	.48	1.56	.28
IN.	.43	.58	.90	.64	.94	6.71	3.65	1.83	.69	.55	1.80	.32

CAL YR 1978 TOTAL 41214 MEAN 113 MAX 977 MIN 23 CFSM 1.13 IN 15.33
WTR YR 1979 TOTAL 51160 MEAN 140 MAX 1080 MIN 20 CFSM 1.40 IN 19.03

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HCC 07.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
03...	1000	80010	--	--	62	--	--	16.0	17.0	--	--
13...	0900	17002	17002	--	29	940	8.1	16.0	12.5	7.2	44
NOV											
06...	1115	80010	--	--	108	--	--	8.0	12.0	--	--
29...	1500	17002	17002	--	65	1080	8.2	1.5	1.5	11.7	36
DEC											
14...	1000	17002	17002	--	70	1600	--	-1.0	.0	14.4	32
14...	1100	17002	17002	--	70	1650	--	-1.0	.0	14.3	32
20...	1015	80010	--	--	62	--	--	1.5	2.5	--	--
JAN											
09...	1000	17002	17002	48	--	1220	7.4	-11.0	.0	10.9	27
29...	1600	80010	--	--	65	--	--	-5.0	.5	--	--
FEB											
28...	1000	17002	17002	175	--	1530	7.4	3.5	1.0	10.5	32
MAR											
06...	1350	80010	--	--	857	--	--	4.0	2.0	--	--
13...	1320	80010	--	--	348	--	--	13.0	3.5	--	--
30...	1000	17002	17002	--	891	570	--	16.0	9.0	10.0	36
APR											
23...	1520	80010	--	--	114	--	--	21.0	15.5	--	--
30...	0800	17002	17002	--	457	700	7.5	4.0	7.0	10.4	36
MAY											
16...	1100	17002	17002	--	112	920	--	17.0	16.0	9.9	40
JUN											
04...	1000	17002	17002	--	28	1140	8.7	28.0	20.0	7.3	40
05...	1455	80010	--	--	25	--	--	19.0	21.5	--	--
JUL											
02...	1200	17002	17002	--	110	750	7.9	23.5	21.0	5.4	43
02...	1300	17002	17002	--	108	750	8.2	24.0	21.0	5.4	43
16...	1425	80010	--	--	24	--	--	19.5	25.0	--	--
AUG											
02...	1000	17002	17002	--	43	800	7.7	24.5	20.5	2.4	28
30...	0730	80010	--	--	132	--	--	18.0	22.0	--	--
SEP											
06...	0800	17002	17002	--	32	700	7.4	22.0	21.0	3.1	24

05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
OCT											
13...	2600	200	91	112	24	--	4.4	.51	1.2	0	400
NOV											
29...	3900	--	87	245	--	--	3.8	.52	1.2	0	200
DEC											
14...	3200	--	115	285	16	--	3.8	.56	1.0	0	--
14...	4200	--	110	300	--	--	4.1	.55	1.0	0	--
JAN											
09...	4500	--	125	250	--	--	4.8	.76	1.5	--	--
FEB											
28...	--	--	100	285	42	8	2.9	.42	--	0	--
MAR											
30...	3400	--	55	67	150	24	1.7	.22	--	0	--
APR											
30...	1300	--	70	72	55	7	1.6	.25	--	0	--
MAY											
16...	1100	--	84	95	54	12	1.8	.00	--	0	--
JUN											
04...	480	--	110	150	12	9	2.7	.52	--	0	--
JUL											
02...	--	--	82	87	60	20	3.8	.44	--	0	--
02...	--	--	84	92	70	23	4.5	.44	--	0	--
AUG											
02...	1500	--	78	97	4	--	3.3	1.0	--	4	--
SEP											
06...	430	--	79	88	14	4	1.9	.50	--	3	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
13...	0	0	20	--	10	40	.0	300	.00	4
NOV										
29...	0	0	0	--	0	60	.0	100	.00	1
DEC										
14...	0	0	0	--	10	80	.0	0	.00	1
14...	0	0	0	--	0	70	.0	100	.00	1
JAN										
09...	0	0	0	300	0	90	.0	100	--	1
FEB										
28...	0	0	70	--	20	--	.0	--	--	1
MAR										
30...	0	0	40	--	80	--	.0	--	--	0
APR										
30...	0	0	10	--	0	--	.0	--	--	1
MAY										
16...	0	0	0	900	0	100	.1	0	.00	1
JUN										
04...	0	0	0	0	--	--	.0	0	--	1
JUL										
02...	0	0	10	--	0	--	.0	--	--	1
02...	0	0	20	--	0	--	.0	--	--	1
AUG										
02...	0	0	10	--	0	--	.0	--	--	0
SEP										
06...	0	0	10	--	0	--	.0	--	--	2

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'07", long 87°31'18", in SE¼NW¼ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft (61 m) upstream from Hohman Street bridge at north city limits of Munster, 0.4 mi (0.6 km) upstream from Illinois-Indiana State line, 4.6 mi (7.4 km) upstream from mouth of Thorn Creek, and at mile 29.6 (47.6 km).

DRAINAGE AREA.--90.0 mi^2 (233.1 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

COOPERATION.--Chemical data were furnished by the Indiana State Board of Health and were reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	STREAM-FLOW (CFS) (00060)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 16...	28	780	7.6	11.0	6.6	15	5400	100	63	30
NOV 13...	29	1120	7.3	13.0	2.5	52	58000	150	120	33
MAR 20...	447	370	7.3	7.0	10.0	47	21000	61	30	260
APR 17...	183	780	7.3	11.0	6.3	43	38000	110	59	48
MAY 14...	119	900	7.3	15.0	3.1	57	100000	95	62	42
JUN 25...	14	350	7.3	23.0	3.4	52	90000	140	160	13
JUL 31...	94	560	7.4	24.0	1.6	40	43000	76	46	380
AUG 28...	50	780	7.5	22.0	.3	45	46000	97	69	17
SEP 25...	13	1500	7.3	16.0	.2	100	3100000	68	240	40

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT 16...	.50	3.6	5.6	1.0	<10	<20	.2	<.00	2
NOV 13...	.10	1.8	17	1.5	<10	<20	.1	<.00	2
MAR 20...	3.1	.30	16	.31	<10	<20	.3	.00	4
APR 17...	1.6	1.0	13	.44	20	<20	.2	.00	1
MAY 14...	.60	2.1	4.2	.74	<10	30	.2	<.00	2
JUN 25...	<.10	8.3	9.8	1.2	<10	20	.2	<.00	1
JUL 31...	1.0	1.2	1.8	.37	40	<20	.4	.00	3
AUG 28...	.30	2.7	4.2	1.2	<10	<20	<.1	<.00	1
SEP 25...	<.10	10	13	2.6	<10	<20	.1	.00	20

05536210 THORN CREEK NEAR CHICAGO HEIGHTS, IL

LOCATION.--Lat 41°30'50", long 87°38'07", in SE¼SE¼ sec.17, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at upstream side of bridge on Halsted Street, at north edge of Chicago Heights, and at mile 10.8 (17.4 km).

DRAINAGE AREA.--17.2 mi^2 (44.5 km^2).

PERIOD OF RECORD.--June 1964 to September 1979 (discontinued). Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-74: 1968(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 627.70 ft (191.323 m) National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Oct. 3, 1961, to June 26, 1964, crest-stage gage at downstream side of bridge at datum 4 ft (1.219 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--15 years, 15.0 ft^3/s (0.425 m^3/s), 11.84 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft^3/s (62.9 m^3/s) June 6, 1974, gage height, 8.31 ft (2.533 m); no flow for part of Sept. 11, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0300	*1070	30.3	*5.20	1.585	Apr. 26	0445	730	20.7	4.18	1.274
Apr. 11	2330	934	26.5	4.76	1.451	Aug. 5	2045	719	20.4	4.15	1.265

Minimum discharge, 0.17 ft^3/s (0.005 m^3/s) Sept. 9, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.40	5.1	13	1.4	22	40	27	2.1	4.6	7.4	1.7
2	.50	.38	4.6	8.0	1.3	19	216	59	1.7	2.6	4.2	1.2
3	12	.66	38	5.0	1.1	200	55	265	1.0	2.8	17	.70
4	2.2	.90	13	3.1	1.0	783	28	48	.99	9.2	4.2	.60
5	7.0	.67	6.5	2.3	.90	205	18	26	4.5	2.6	50	.56
6	1.7	13	3.8	1.6	.93	106	12	16	1.4	2.1	23	.45
7	.70	3.5	3.5	1.3	1.1	109	10	11	27	1.6	6.7	.71
8	.60	2.3	2.8	1.1	.96	126	47	9.1	4.4	.89	8.0	.33
9	.50	2.2	2.5	1.0	.99	131	22	7.7	8.6	1.1	147	.53
10	.40	1.6	2.0	.96	1.1	58	12	6.5	5.0	.96	36	.91
11	.40	1.3	1.6	.93	1.0	41	152	20	2.2	.42	11	.36
12	.40	1.4	2.5	.99	.91	26	366	7.9	1.2	.78	4.7	.33
13	.32	18	1.8	1.1	1.2	64	48	9.3	1.3	.67	2.6	.47
14	.70	5.8	1.4	1.2	1.3	85	24	26	.94	1.1	1.5	.40
15	.84	3.0	1.6	1.1	1.3	37	14	19	.76	1.1	.70	.29
16	1.7	2.1	1.2	1.1	1.2	30	11	8.5	.53	.69	.60	.39
17	.70	12	1.0	1.2	1.1	51	8.2	5.9	.44	.40	13	.35
18	2.6	4.1	.94	1.2	1.0	158	7.0	4.7	1.6	.40	136	.47
19	.70	2.1	.94	1.2	1.2	395	5.8	4.3	8.5	.56	21	.67
20	.70	1.6	2.7	1.3	1.5	225	5.8	3.8	2.0	.48	103	.54
21	1.5	1.1	2.5	1.3	7.8	73	19	3.4	1.6	.46	25	.54
22	.50	1.2	1.6	1.2	6.2	40	8.2	2.9	1.5	.42	13	.51
23	9.2	22	1.3	1.3	70	42	6.2	2.8	.70	.50	18	.65
24	.50	4.2	1.9	1.5	30	59	26	2.8	.53	.47	9.2	.86
25	7.4	2.6	1.6	1.4	14	34	61	2.4	.73	5.9	4.7	1.0
26	2.6	2.0	1.3	1.4	8.8	20	373	2.2	.47	.70	3.7	.80
27	1.0	6.5	1.6	1.3	12	15	93	2.0	.37	.50	6.5	.71
28	.40	3.8	1.9	1.5	14	22	72	2.1	.81	.59	2.9	.86
29	.24	3.1	6.0	1.4	---	317	55	1.8	12	.59	20	.93
30	.50	2.3	47	1.4	---	233	54	1.5	26	82	6.2	.95
31	.32	---	18	1.5	---	91	---	7.6	---	11	2.9	---
TOTAL	59.42	125.81	182.18	63.88	185.29	3817	1869.2	616.2	120.87	138.18	709.70	19.77
MEAN	1.92	4.19	5.88	2.06	6.62	123	62.3	19.9	4.03	4.46	22.9	.66
MAX	12	22	47	13	70	783	373	265	27	82	147	1.7
MIN	.24	.38	.94	.93	.90	15	5.8	1.5	.37	.40	.60	.29
CFSM	.11	.24	.34	.12	.39	7.15	3.62	1.16	.23	.26	1.33	.04
IN.	.13	.27	.39	.14	.40	8.25	4.04	1.33	.26	.30	1.53	.04

CAL YR 1978 TOTAL 5115.36 MEAN 14.0 MAX 672 MIN .17 CFSM .81 IN 11.06
WTR YR 1979 TOTAL 7907.50 MEAN 21.7 MAX 783 MIN .24 CFSM 1.26 IN 17.10

05536215 THORN CREEK AT GLENWOOD, IL

LOCATION.--Lat 41°31'50", long 87°36'20", in SW¼SE¼ sec.9, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank 20 ft (6 m) downstream from Baltimore and Ohio Chicago Terminal Railroad bridge, 0.7 mi (1.1 km) north of Chicago Heights, 0.8 mi (1.3 km) south of Glenwood, 1.0 mi (1.6 km) upstream from Deer Creek, and at mile 9.2 (14.8 km).

DRAINAGE AREA.--24.7 mi^2 (64.0 km^2).

PERIOD OF RECORD.--May 1949 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1955. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.97 ft (186.224 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Figures of discharge include about 13 ft^3/s (0.37 m^3/s) pumped from ground-water sources for municipal supply and about 5 ft^3/s (0.14 m^3/s) of ground-water pumpage for industrial use. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--30 years, 36.5 ft^3/s (1.034 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft^3/s (73.6 m^3/s) Aug. 17, 1968, gage height, 11.26 ft (3.432 m); minimum daily, 6.0 ft^3/s (0.17 m^3/s) July 4, Aug. 21, Sept. 5, 11, 25, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft^3/s (21 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0400	*1420	40.2	*10.17	3.100	Apr. 26	0615	1020	28.9	9.28	2.829
Mar. 29	1430	884	25.0	8.85	2.697	May 3	0245	777	22.0	8.49	2.588
Apr. 12	0030	1150	32.6	9.60	2.926	Aug. 9	0430	783	22.2	8.51	2.594

Minimum daily discharge, 14 ft^3/s (0.40 m^3/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	16	32	46	18	58	78	62	24	26	27	20
2	18	16	35	30	17	50	322	106	22	20	24	18
3	36	16	70	26	17	344	95	419	19	19	43	18
4	18	17	35	23	16	1070	63	89	21	34	22	19
5	27	16	28	20	17	314	52	60	28	19	108	20
6	18	41	25	18	17	176	42	45	22	18	76	20
7	16	26	23	16	17	188	38	40	60	17	28	20
8	14	25	22	17	17	214	98	36	28	15	30	17
9	16	24	20	17	16	205	60	34	41	17	270	16
10	16	24	18	16	16	107	44	33	30	18	94	19
11	16	23	18	16	15	68	204	47	24	18	40	18
12	17	22	19	17	16	60	556	33	23	18	25	18
13	18	49	20	16	17	116	95	34	23	20	23	18
14	19	31	20	15	17	128	61	67	22	18	22	18
15	15	24	21	17	16	68	46	49	21	17	20	16
16	18	23	20	18	16	65	40	35	20	16	19	15
17	16	40	19	18	16	82	37	30	17	16	42	16
18	20	24	21	18	15	180	34	28	22	17	273	17
19	17	20	20	19	16	485	33	27	36	18	48	17
20	16	20	25	20	16	295	32	24	24	17	207	16
21	15	20	22	19	25	112	52	24	21	16	55	17
22	17	20	21	18	24	73	34	25	20	15	38	16
23	30	55	20	18	122	82	33	24	18	17	53	16
24	20	36	22	19	55	111	67	23	16	18	35	16
25	38	28	18	17	36	71	111	22	18	30	27	18
26	27	23	18	17	34	55	536	21	18	18	24	17
27	23	32	18	17	41	48	168	20	18	18	33	16
28	20	27	18	17	41	60	123	20	19	17	25	18
29	18	28	31	18	---	432	110	20	39	15	55	16
30	17	26	121	18	---	358	98	22	74	160	30	15
31	17	---	59	18	---	145	---	33	---	33	25	---
TOTAL	613	792	879	599	706	5820	3362	1552	788	735	1841	521
MEAN	19.8	26.4	28.4	19.3	25.2	188	112	50.1	26.3	23.7	59.4	17.4
MAX	38	55	121	46	122	1070	556	419	74	160	273	20
MIN	14	16	18	15	15	48	32	20	16	15	19	15

CAL YR 1978 TOTAL 13872 MEAN 38.0 MAX 854 MIN 12
WTR YR 1979 TOTAL 18208 MEAN 49.9 MAX 1070 MIN 14

05536235 DEER CREEK NEAR CHICAGO HEIGHTS, IL

LOCATION.--Lat 41°31'15", long 87°35'25", 0.1 mi (0.2 km) west of center of sec.14, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on Joe Orr Road, 0.4 mi (0.6 km) east of Cottage Grove Avenue, 1.0 mi (1.6 km) north of U.S. Highway 30, 1.5 mi (2.4 km) northeast of Chicago Heights, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--23.1 mi^2 (59.8 km^2).

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 615.95 ft (187.742 m) National Geodetic Vertical Datum of 1929. See WSP 1707 or 1727 for history of changes prior to Aug. 13, 1958.

REMARKS.--Records good except those for winter periods, which are poor. Undetermined amount of flow diverted for irrigation. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 17.2 ft^3/s (0.487 m^3/s), 10.11 in/yr (257 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft^3/s (39.1 m^3/s) July 13, 1957, gage height, 11.75 ft (3.581 m); no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1815	*533	15.1	[a]*11.58	3.530	Apr. 12	0930	403	11.4	9.88	3.011
Mar. 19	1415	386	10.9	9.77	2.978	Apr. 26	1545	296	8.38	9.00	2.743
Mar. 30	0030	403	11.4	9.88	3.011	May 3	1045	307	8.69	9.10	2.774

[a]ice jam

Minimum discharge, 0.12 ft^3/s (0.003 m^3/s) Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.35	4.0	16	1.5	30	92	54	2.2	4.2	6.5	6.4
2	.64	.18	5.6	11	1.5	37	163	39	2.4	2.1	4.0	4.9
3	2.4	.24	20	7.0	1.4	66	123	258	2.2	1.9	4.0	4.1
4	1.2	.24	45	5.8	1.3	500	64	119	1.8	3.7	2.4	3.4
5	2.1	.33	16	4.2	1.3	400	42	54	1.8	2.5	4.4	2.9
6	1.4	2.4	9.5	3.5	1.2	330	31	34	1.7	2.3	22	2.5
7	1.6	.47	6.2	2.7	1.1	280	23	24	5.1	2.1	11	2.2
8	.89	.30	4.5	2.3	1.1	270	26	18	3.0	2.0	5.9	2.0
9	.64	.59	3.2	2.0	1.1	291	28	13	6.5	1.9	55	1.7
10	.59	.47	2.9	1.7	1.2	164	20	9.8	6.5	1.4	52	1.2
11	.74	.33	3.2	1.4	1.3	103	37	7.8	4.0	1.2	39	1.0
12	.60	.47	3.5	1.4	1.4	93	342	7.7	3.0	1.0	18	1.2
13	.89	3.5	3.9	1.5	1.4	93	145	7.4	3.2	1.2	11	.94
14	1.1	4.5	4.2	1.6	1.5	165	68	12	2.4	1.1	9.3	.91
15	.79	3.3	3.0	1.7	1.5	120	37	17	1.9	1.1	6.6	1.3
16	.89	1.8	3.2	1.7	1.5	72	26	8.9	1.7	.95	4.6	1.2
17	.74	4.5	2.6	1.8	1.5	89	20	6.2	1.7	.89	9.3	1.2
18	1.6	5.0	2.3	1.8	1.5	153	14	5.4	2.2	.64	98	1.1
19	1.3	2.9	2.1	1.9	1.5	338	12	5.1	3.2	.59	55	1.2
20	1.9	1.3	2.3	1.9	1.7	292	9.5	5.1	2.0	.74	89	1.5
21	.40	.95	4.1	1.9	2.3	169	11	4.9	1.9	.69	64	1.6
22	.47	.97	3.7	1.9	3.8	89	11	4.1	1.6	.74	30	1.4
23	2.1	10	2.9	1.9	6.0	66	8.5	3.8	1.8	.64	32	1.4
24	.32	11	2.2	1.9	11	82	18	3.3	1.8	.64	21	.92
25	2.5	3.9	3.6	1.9	46	73	57	3.2	1.5	1.4	12	.79
26	5.0	1.9	2.6	1.8	43	42	233	2.9	1.1	1.1	8.8	.77
27	2.3	3.4	2.2	1.8	39	32	158	2.7	.95	1.2	12	.82
28	1.7	3.6	2.7	1.7	34	35	116	2.5	1.2	1.1	10	.85
29	1.0	3.5	3.3	1.7	---	182	72	2.2	2.0	.95	17	.89
30	.55	2.5	25	1.6	---	321	102	2.0	5.9	8.1	16	.94
31	.38	---	22	1.6	---	196	---	3.1	---	16	9.5	---
TOTAL	39.70	74.89	221.5	92.6	212.6	5173	2109.0	740.1	78.25	66.07	739.3	53.23
MEAN	1.28	2.50	7.15	2.99	7.59	167	70.3	23.9	2.61	2.13	23.8	1.77
MAX	5.0	11	45	16	46	500	342	258	6.5	16	98	6.4
MIN	.32	.18	2.1	1.4	1.1	30	8.5	2.0	.95	.59	2.4	.77
CFSM	.06	.11	.31	.13	.33	7.23	3.04	1.04	.11	.09	1.03	.08
IN.	.06	.12	.36	.15	.34	8.33	3.40	1.19	.13	.11	1.19	.09

CAL YR 1978 TOTAL 6678.36 MEAN 18.3 MAX 379 MIN .14 CFSM .79 IN 10.75
WTR YR 1979 TOTAL 9600.24 MEAN 26.3 MAX 500 MIN .18 CFSM 1.14 IN 15.46

05536255 BUTTERFIELD CREEK AT FLOSSMOOR, IL

LOCATION.--Lat 41°32'25", long 87°38'55", in NE¼NW¼ sec.8, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of Reigle Road Bridge at Homewood city limits, 0.1 mi (0.2 km) north of Holbrook Road, 0.8 mi (1.3 km) east of Flossmoor, and at mile 1.2 (1.9 km).

DRAINAGE AREA.--23.5 mi^2 (60.9 km^2).

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1437: 1948(M), 1953, 1955. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 616.80 ft (188.001 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 17.4 ft^3/s (0.493 m^3/s), 10.05 in/yr (255 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft^3/s (722 m^3/s) July 13, 1957, gage height, 11.78 ft (3.591 m); no flow at times in several years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1045	*730	20.7	[a]*10.59	3.228	Apr. 12	0345	565	16.0	8.82	2.688

[a]Ice jam

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	.18	1.7	8.1	.28	28	59	41	1.7	6.7	7.6	2.6
2	.17	.62	2.8	3.9	.26	37	107	43	.91	1.7	4.0	2.1
3	3.7	.27	28	2.8	.25	100	59	232	.83	.92	5.4	1.8
4	1.2	.18	19	1.5	.24	580	38	72	.76	11	3.8	1.4
5	1.5	.02	6.4	1.0	.23	290	28	41	3.1	2.2	42	1.5
6	1.2	4.8	2.8	.70	.25	180	19	26	.97	.80	90	1.2
7	.44	3.8	2.4	.50	.24	170	16	17	18	.49	20	1.1
8	.14	1.2	2.1	.40	.22	170	34	13	8.9	.38	6.6	.99
9	.04	.56	1.4	.35	.24	180	43	10	2.4	.32	151	.91
10	.00	.56	1.2	.32	.30	104	25	7.8	2.0	.17	46	.62
11	.00	.27	1.5	.32	.33	70	85	11	2.0	.23	15	.38
12	.00	.14	1.8	.34	.34	55	403	8.7	.83	.17	7.8	.56
13	.00	.91	2.2	.42	.35	80	100	8.7	.76	.10	4.2	.44
14	.00	4.6	1.3	.40	.35	114	54	26	.83	.08	2.8	.23
15	.00	1.8	1.2	.35	.33	61	37	20	.56	.44	1.8	.04
16	.00	.76	1.2	.33	.30	48	26	8.4	.38	.22	1.5	.00
17	3.1	4.6	1.1	.38	.25	56	19	5.6	.38	.17	6.8	.00
18	1.8	4.4	1.0	.42	.23	91	14	4.0	.69	.02	129	.00
19	2.5	1.6	1.1	.45	.22	232	12	3.3	4.0	.00	38	.32
20	.98	.83	1.6	.45	.70	170	11	3.1	1.7	.00	134	.06
21	.69	.45	2.7	.41	1.9	80	22	2.4	1.3	.00	58	.00
22	.38	.32	1.8	.37	3.0	48	14	2.0	.44	.00	23	.00
23	4.8	9.9	1.1	.32	5.4	44	11	1.7	.44	.00	36	.00
24	1.8	4.6	1.5	.29	10	56	22	1.8	.32	.00	16	.00
25	3.0	1.6	1.7	.26	45	42	58	1.6	.32	1.4	9.0	.00
26	5.2	.90	1.1	.25	38	26	241	1.6	.32	.69	5.4	.00
27	1.8	1.3	.90	.25	33	21	114	1.6	.27	.10	7.8	.00
28	.91	3.2	.65	.40	30	25	99	1.3	.32	.00	4.4	.00
29	.32	1.7	1.6	.36	---	185	69	1.1	20	.10	18	.00
30	.23	1.5	40	.32	---	266	81	.99	44	50	6.8	.00
31	.04	---	22	.30	---	105	---	1.3	---	23	3.6	---
TOTAL	36.79	57.57	156.85	26.96	172.21	3714	1920	618.99	119.43	101.40	905.3	16.25
MEAN	1.19	1.92	5.06	.87	6.15	120	64.0	20.0	3.98	3.27	29.2	.54
MAX	5.2	9.9	40	8.1	45	580	403	232	44	50	151	2.6
MIN	.00	.02	.65	.25	.22	21	11	.99	.27	.00	1.5	.00
CFSM	.05	.08	.22	.04	.26	5.11	2.72	.85	.17	.14	1.24	.02
IN.	.06	.09	.25	.04	.27	5.88	3.04	.98	.19	.16	1.43	.03

CAL YR 1978 TOTAL 6163.41 MEAN 16.9 MAX 699 MIN .00 CFSM .72 IN 9.76
WTR YR 1979 TOTAL 7845.75 MEAN 21.5 MAX 580 MIN .00 CFSM .92 IN 12.42

05536265 LANSING DITCH NEAR LANSING, IL

LOCATION.--Lat 41°31'40", long 87°31'45", at north boundary of sec.17, T.35 N., R.15 E., Cook County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on 202nd Street, 0.2 mi (0.3 km) west of Indiana State line, 0.5 mi (0.8 km) east of Burnham Avenue, 2 mi (3 km) south of Lansing, and at mile 2.7 (4.3 km).

DRAINAGE AREA.--8.84 mi^2 (22.90 km^2).

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 607.16 ft (185.062 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 20, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, July 14 to Aug. 21, which are poor. Some diurnal fluctuation caused by pumping operations above station. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 7.83 ft^3/s (0.222 m^3/s), 12.03 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 461 ft^3/s (13.1 m^3/s) May 10 or 11, 1948, gage height, 9.24 f (2.816 m), from floodmark; maximum gage height, 10.18 ft (3.103 m) Oct. 11, 1954; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 222 ft^3/s (6.29 m^3/s) Mar. 4, gage height, 8.13 ft (2.478 m); minimu daily, 2.4 ft^3/s (0.068 m^3/s) Nov. 21.

REVISIONS.--Revised peak discharges above base of 140 ft^3/s (4.0 m^3/s) and annual maximum (*) for water years 1975-78 and revised daily discharges, in cubic feet per second, for high-water periods in these years are give below. These figures supersede those published in the reports for 1975-78.

Water Year	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
1975	Jan. 10, 1975	2330	*199	5.64	*7.79	2.374
1976	Apr. 25, 1976	1145	*202	5.72	*7.75	2.362
	May 6, 1976	1730	179	5.07	7.31	2.228
1977	Sept. 18, 1977	0945	*188	5.32	*7.48	2.280
1978	May 13, 1978	0230	*138	3.91	*6.51	1.984

Apr. 28, 1975	67	Mar. 5, 1976	114	Sept. 19, 1977	82
June 15, 1975	109	Apr. 25, 1976	159		
June 16, 1975	63	Apr. 26, 1976	90	Mar. 21, 1978	105
Feb. 21, 1976	92	May 6, 1976	107	Apr. 6, 1978	100
Mar. 3, 1976	92	May 7, 1976	92	Apr. 7, 1978	56
Mar. 4, 1976	90	Sept. 13, 1977	138	May 12, 1978	65
				May 13, 1978	120

Month		Total	Mean	Max	Min	Cfsm	In.
April	1975	660.4	22.0	67	6.9	2.49	2.78
June	1975	474.2	15.8	109	4.2	1.79	2.00
Wtr Yr	1975	4,174.0	11.4	139	1.8	1.28	17.51
Cal Yr	1975	4,063.30	11.1	139	1.5	1.26	17.09
February	1976	514.4	17.7	92	1.8	2.00	2.16
March	1976	735.6	23.7	114	2.9	2.68	3.09
April	1976	438.3	14.6	159	1.9	1.65	1.84
May	1976	504.17	16.3	107	.37	1.84	2.12
Wtr Yr	1976	3,608.06	9.86	159	.06	1.12	15.17
Cal Yr	1976	3,517.06	9.61	159	.06	1.09	14.79
September	1977	533.2	17.8	138	3.0	2.01	2.24
Wtr Yr	1977	2,897.59	7.94	138	.00	.90	12.20
Cal Yr	1977	3,180.48	8.71	138	.00	.99	13.38
March	1978	651.6	21.0	105	2.3	2.38	2.74
April	1978	481.8	16.1	100	4.4	1.82	2.03
May	1978	491.3	15.8	120	4.1	1.79	2.07
Wtr Yr	1978	3,274.31	8.97	120	.18	1.01	13.79

05536265 LANSING DITCH NEAR LANSING, IL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	3.1	13	16	4.0	16	29	25	9.0	5.9	7.0	5.3
2	6.6	3.1	14	15	5.0	20	44	22	8.4	4.0	7.0	4.8
3	6.7	4.2	44	8.9	4.7	51	32	71	8.4	2.8	9.0	6.5
4	6.4	6.9	40	6.4	4.2	191	19	35	8.2	4.2	7.0	8.5
5	6.9	6.9	22	5.4	3.5	115	13	22	8.7	2.8	5.6	8.4
6	6.2	7.5	13	5.2	3.0	100	7.9	17	8.3	2.9	11	8.8
7	6.7	8.1	7.9	4.9	3.5	90	9.2	14	10	2.9	8.0	8.0
8	6.7	8.4	3.9	5.4	4.0	79	10	12	8.6	6.6	2.5	3.0
9	5.5	7.8	3.1	4.7	3.5	70	12	11	8.8	7.2	14	5.7
10	6.4	7.5	3.1	4.5	3.3	38	8.9	10	11	7.1	10	4.5
11	6.7	7.8	3.3	4.5	3.2	24	22	10	7.9	6.7	12	4.6
12	6.4	8.4	3.7	4.5	3.1	15	96	9.6	7.5	6.6	8.6	4.6
13	6.7	10	3.9	4.7	3.5	23	46	9.8	5.7	5.9	7.2	6.8
14	8.1	13	3.3	4.7	3.7	33	29	14	3.3	6.0	6.4	9.0
15	8.1	8.1	3.3	5.4	4.0	16	19	9.6	3.1	6.0	6.0	9.0
16	9.7	7.8	3.0	4.7	3.8	12	15	6.4	3.1	5.5	5.8	8.7
17	11	8.7	2.8	4.9	3.6	15	15	5.9	3.1	5.5	8.0	8.5
18	11	10	2.8	4.3	3.4	21	12	5.6	5.6	5.2	27	9.0
19	11	8.7	3.5	3.0	3.2	47	12	5.4	7.7	6.0	13	8.9
20	12	6.2	7.0	3.0	3.5	42	11	5.4	9.5	3.2	31	8.7
21	13	2.4	7.0	3.0	5.0	28	13	5.2	9.3	3.0	18	8.9
22	10	2.5	6.7	9.2	7.0	16	12	4.9	5.5	3.0	12	8.8
23	12	8.7	6.7	9.2	12	19	9.9	3.7	6.9	3.3	11	7.9
24	10	3.6	6.2	7.6	10	30	15	3.6	5.5	3.5	10	7.8
25	12	2.8	5.6	3.5	9.0	28	30	3.5	5.3	4.2	9.3	7.8
26	13	2.8	5.4	3.4	8.0	16	79	3.5	5.1	4.4	8.8	7.7
27	9.3	3.2	4.9	3.3	9.0	16	50	3.8	5.1	6.3	12	7.8
28	9.0	4.0	4.9	3.3	11	18	42	4.5	4.7	7.2	9.4	7.7
29	8.1	6.2	5.2	3.3	---	54	32	4.8	5.8	5.6	15	7.1
30	5.7	8.7	13	3.3	---	85	39	10	6.6	10	13	7.6
31	3.1	---	12	3.4	---	48	---	9.7	---	9.0	8.8	---
TOTAL	260.9	197.1	278.2	172.6	144.7	1376	783.9	377.9	205.7	162.5	333.4	220.4
MEAN	8.42	6.57	8.97	5.57	5.17	44.4	26.1	12.2	6.86	5.24	10.8	7.35
MAX	13	13	44	16	12	191	96	71	11	10	31	9.0
MIN	3.1	2.4	2.8	3.0	3.0	12	7.9	3.5	3.1	2.8	2.5	3.0
CFSM	.95	.74	1.02	.63	.59	5.02	2.95	1.38	.78	.59	1.22	.83
IN.	1.10	.83	1.17	.73	.61	5.79	3.30	1.59	.87	.68	1.40	.93

CAL YR 1978 TOTAL 3226.92 MEAN 8.84 MAX 120 MIN .18 CFSM 1.00 IN 13.58
WTR YR 1979 TOTAL 4513.30 MEAN 12.4 MAX 191 MIN 2.4 CFSM 1.40 IN 18.99

05536270 NORTH CREEK NEAR LANSING, IL

LOCATION.--Lat 41°32'45", long 87°33'30", in SE¼SE¼ sec.1, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Torrence Avenue, 1.1 mi (1.8 km) south of Lansing, 2.7 mi (4.3 km) north of U.S. Highway 30, and at mile 5.1 (8.2 km).

DRAINAGE AREA.--16.8 mi^2 (43.5 km^2).

PERIOD OF RECORD.--May 1948 to September 1979 (discontinued). Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1337: 1948(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 599.29 ft (182.664 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 16, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, Dec. 22 to Jan. 22, which are poor. Some diurnal fluctuation caused by pumping operations above the station. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 14.6 ft^3/s (0.413 m^3/s), 11.80 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 692 ft^3/s (19.6 m^3/s) Oct. 10, 1954, gage height, 8.96 ft (2.731 m); no flow at times in several years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 20, 1948, reached a stage of 8.51 ft (2.594 m), from floodmark, discharge, 730 ft^3/s (20.7 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 210 ft^3/s (5.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0945	*505	14.3	*8.63	2.630	Apr. 12	0445	229	6.49	7.45	2.271
Mar. 30	0130	211	5.98	7.29	2.222						

Minimum daily discharge, 2.9 ft^3/s (0.082 m^3/s) Nov. 3, Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	3.1	16	24	6.0	28	51	46	9.7	6.3	7.5	6.3
2	6.0	3.0	18	22	7.7	40	87	36	8.9	4.9	7.6	5.9
3	7.9	2.9	33	14	7.2	87	58	140	8.4	3.3	9.4	6.3
4	6.4	6.9	24	10	6.4	398	31	75	7.6	5.5	7.6	8.4
5	7.3	8.8	15	8.5	5.4	236	20	41	8.3	3.6	6.2	8.4
6	6.3	8.3	12	7.7	4.5	194	13	26	7.5	3.3	14	8.2
7	7.1	8.2	10	7.4	5.3	192	13	18	9.7	3.3	8.4	8.8
8	6.9	8.0	6.0	7.2	6.0	181	28	14	8.6	4.4	2.9	3.8
9	6.3	8.0	5.3	7.0	5.5	181	40	12	8.7	6.5	26	6.1
10	6.8	8.0	4.7	6.7	5.1	109	22	10	11	6.5	18	5.4
11	6.6	7.8	5.0	6.4	5.0	65	47	9.9	7.9	6.3	22	5.1
12	6.6	8.2	5.3	6.6	4.8	32	204	9.1	6.8	5.9	10	5.6
13	7.5	10	5.9	6.8	5.4	54	100	9.2	5.9	6.6	8.4	6.4
14	8.6	12	5.5	7.0	5.6	71	43	15	3.9	6.5	7.6	9.0
15	7.6	8.0	5.2	6.8	6.0	34	24	18	3.6	6.4	7.1	8.9
16	9.1	7.5	5.1	6.5	5.8	22	15	12	3.6	5.9	6.9	8.7
17	10	8.8	5.0	6.4	5.6	24	13	9.6	3.5	5.9	9.7	8.3
18	11	9.1	4.7	5.5	5.2	38	10	8.9	4.1	5.6	57	8.8
19	11	8.5	5.3	4.6	5.0	99	9.9	8.1	6.9	6.6	27	9.0
20	10	7.9	9.4	4.6	6.0	89	12	7.5	7.6	3.8	67	9.2
21	11	5.2	10	4.6	8.5	53	10	6.9	8.3	3.5	42	10
22	10	4.3	11	6.0	12	30	9.2	6.0	4.9	3.5	19	11
23	12	9.4	10	7.6	20	30	7.6	4.2	6.3	3.9	14	9.2
24	11	6.7	10	8.0	17	45	14	4.4	5.3	4.1	12	9.1
25	13	4.7	9.0	6.0	15	48	39	4.5	5.3	4.9	10	9.4
26	14	4.4	8.5	5.5	14	28	155	5.6	4.8	5.0	9.2	8.7
27	9.6	5.8	8.0	5.2	16	26	117	7.2	4.8	6.9	13	9.8
28	9.1	6.9	8.0	5.0	19	28	88	6.3	4.7	7.8	10	9.7
29	8.9	7.2	8.5	5.0	---	106	55	5.9	6.3	6.0	16	9.7
30	6.4	12	20	5.0	---	184	72	10	9.2	11	13	10
31	3.1	---	17	5.3	---	108	---	11	---	9.4	9.6	---
TOTAL	263.8	219.6	320.4	238.9	235.0	2860	1407.7	597.3	202.1	173.1	498.1	243.2
MEAN	8.51	7.32	10.3	7.71	8.39	92.3	46.9	19.3	6.74	5.58	16.1	8.11
MAX	14	12	33	24	20	398	204	140	11	11	67	11
MIN	3.1	2.9	4.7	4.6	4.5	22	7.6	4.2	3.5	3.3	2.9	3.8
CFSM	.51	.44	.61	.46	.50	5.49	2.79	1.15	.40	.33	.96	.48
IN.	.58	.49	.71	.53	.52	6.33	3.12	1.32	.45	.38	1.10	.54

CAL YR 1978 TOTAL 5052.14 MEAN 13.8 MAX 229 MIN .94 CFSM .82 IN 11.19
WTR YR 1979 TOTAL 7259.20 MEAN 19.9 MAX 398 MIN 2.9 CFSM 1.19 IN 16.07

05536275 THORN CREEK AT THORNTON, IL

LOCATION.--Lat 41°34'05", long 87°36'30", near center of N½ sec.34, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Margaret Street in Thornton, 1.0 mi (1.6 km) downstream from North Creek, and at mile 4.2 (6.8 km).

DRAINAGE AREA.--104 mi^2 (269 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1948 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1707: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft (178.744 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. Some diurnal fluctuation caused by pumping operations above station. Figures of discharge include about 16 ft^3/s (0.45 m^3/s) pumped from ground-water sources for municipal supply and an undetermined amount of ground-water pumpage for industrial use.

AVERAGE DISCHARGE.--31 years, 98.5 ft^3/s (2.790 m^3/s), 12.86 in/yr (327 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,700 ft^3/s (133 m^3/s) July 13, 1957, gage height, 16.00 ft (4.877 m); minimum daily, 4.4 ft^3/s (0.12 m^3/s) Sept. 11, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 5, 1947, reached a stage of 14.34 ft (4.371 m), from floodmark, discharge, 4,200 ft^3/s (119 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s (25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	2215	*2680	75.9	*13.97	4.258	Apr. 12	1330	1400	39.6	10.92	3.328
Mar. 19	2015	930	26.3	9.08	2.768	Apr. 26	1715	1090	30.9	9.81	2.990
Mar. 30	0845	1240	35.1	10.39	3.167	May 3	1430	905	25.6	8.98	2.737

Minimum daily discharge, 21 ft^3/s (0.59 m^3/s) Nov. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	22	45	172	30	154	353	261	47	50	54	40
2	31	22	54	102	31	166	568	206	43	27	46	34
3	60	21	149	92	33	338	428	800	36	25	67	33
4	35	21	126	60	33	1780	239	502	36	46	45	32
5	42	21	67	48	35	1940	174	246	51	30	47	32
6	36	53	49	42	35	877	127	173	38	26	237	32
7	32	46	42	39	33	803	102	131	77	26	76	32
8	31	35	40	37	33	738	179	100	51	25	55	30
9	29	35	34	35	32	829	215	83	46	25	375	28
10	27	35	31	34	32	581	147	73	51	25	236	29
11	26	37	31	31	32	306	237	96	36	24	182	29
12	27	35	35	31	32	237	1140	72	31	24	67	29
13	26	52	39	32	33	278	669	69	31	25	50	28
14	31	63	36	31	32	501	299	125	30	26	39	29
15	26	38	35	35	32	288	193	131	27	26	37	30
16	30	34	34	32	30	215	144	78	25	24	34	28
17	27	54	33	32	31	252	115	63	25	23	66	27
18	30	51	33	32	32	360	92	55	27	23	445	27
19	32	42	33	31	32	771	77	54	43	23	239	27
20	28	35	42	32	31	822	76	50	31	23	402	27
21	27	32	47	32	35	508	123	46	32	22	293	27
22	25	31	41	31	42	287	93	45	29	22	149	28
23	51	82	38	31	147	241	74	42	26	22	156	27
24	30	48	40	33	143	291	132	38	27	23	96	27
25	42	36	38	32	102	270	291	36	25	30	66	28
26	50	31	35	32	95	187	790	37	26	25	53	25
27	32	39	33	31	115	154	687	36	25	24	65	25
28	27	44	33	31	118	164	534	36	25	25	58	25
29	24	37	37	32	---	455	344	34	46	25	103	25
30	24	42	222	32	---	1100	400	38	116	147	73	24
31	24	---	159	32	---	671	---	58	---	90	51	---
TOTAL	996	1174	1711	1329	1441	16564	9042	3814	1159	1001	3962	864
MEAN	32.1	39.1	55.2	42.9	51.5	534	301	123	38.6	32.3	128	28.8
MAX	60	82	222	172	147	1940	1140	800	116	147	445	40
MIN	24	21	31	31	30	154	74	34	25	22	34	24
CFSM	.31	.38	.53	.41	.50	5.14	2.89	1.18	.37	.31	1.23	.28
IN.	.36	.42	.61	.48	.52	5.92	3.23	1.36	.41	.36	1.42	.31

CAL YR 1978 TOTAL 33391 MEAN 91.5 MAX 1770 MIN 21 CFSM .88 IN 11.94
WTR YR 1979 TOTAL 43057 MEAN 118 MAX 1940 MIN 21 CFSM 1.14 IN 15.40

05536275 THORN CREEK AT THORNTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-22 and 79-23 as site HBD 04.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (COOE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (OEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
02...	1545	80010	--	28	--	--	16.0	17.5	--
NOV									
02...	1415	80010	--	19	--	--	19.0	13.5	--
DEC									
13...	1500	80010	--	38	--	--	1.0	4.5	--
JAN									
22...	1605	80010	--	30	--	--	-2.5	4.0	--
MAR									
06...	0845	80010	--	881	--	--	-1.0	1.0	--
APR									
24...	0945	80010	--	71	--	--	16.0	15.0	--
JUN									
05...	1430	80010	--	57	--	--	24.0	20.0	--
19...	1500	17002	17002	47	1100	8.2	26.0	19.5	--
JUL									
24...	0700	17002	17002	23	2600	7.7	24.0	22.0	--
24...	0800	17002	17002	22	2600	7.7	24.0	22.0	--
AUG									
16...	0900	17002	17002	32	1800	7.6	15.0	18.0	--
23...	0830	80010	--	177	--	--	23.0	21.0	--
SEP									
07...	0800	17002	17002	32	2000	7.7	16.5	20.0	5.5

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
JUN									
19...	39	--	60	42	50	1	2.5	1.2	--
JUL									
24...	--	--	415	440	7	--	--	--	--
24...	28	--	410	440	10	7	10	.54	8.5
AUG									
16...	28	--	335	280	35	14	7.7	.71	--
SEP									
07...	32	2400	375	280	30	8	7.7	.72	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOVERABLE (UG/L AS CO) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
JUN												
19...	0	--	0	0	20	1500	0	--	.0	100	.00	2
JUL												
24...	5	800	0	0	10	100	0	60	.8	0	.00	1
24...	5	800	0	0	10	100	0	60	.1	0	.00	1
AUG												
16...	--	900	--	--	10	--	0	--	--	--	.00	3
SEP												
07...	--	700	--	--	10	--	0	--	.0	--	.00	6

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'05", long 87°34'38", in SW¼SW¼ sec.13, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on U.S. Highway 6, 0.6 mi (1.0 km) downstream from Thorn Creek, 1.6 mi (2.6 km) east of South Holland, and at mile 24.4 (39.3 km).

DRAINAGE AREA.--205 mi^2 (531 km^2).

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.260 m) National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 6.1 mi (9.8 km) downstream; prior to Nov. 17, 1947, nonrecording gage at same site read twice daily.

REMARKS.--Records good except those for winter periods, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 8 mi (13 km) below station, diverts the entire flow to the Mississippi River basin. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--32 years, 178 ft^3/s (5.041 m^3/s), 11.79 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft^3/s (126 m^3/s) July 14, 1957, gage height, 20.11 ft (6.130 m); minimum daily, 7.9 ft^3/s (0.22 m^3/s) Oct. 6, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft (5.864 m), from floodmarks, discharge, 4,760 ft^3/s (135 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft^3/s (87.8 m^3/s) Mar. 5, gage height, 17.82 ft (5.432 m); minimum daily, 33 ft^3/s (0.93 m^3/s) Nov. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	34	59	306	46	272	999	560	121	144	155	97
2	46	33	78	210	47	307	747	448	90	63	130	80
3	100	33	193	170	49	501	987	1100	80	46	190	67
4	68	33	219	100	52	2120	708	925	73	100	140	63
5	64	34	131	82	54	2960	511	542	88	65	155	63
6	63	67	94	72	57	1920	401	391	88	48	355	60
7	50	78	77	64	56	1480	309	303	152	45	170	59
8	49	47	74	61	55	1320	268	249	153	42	118	55
9	46	44	63	59	54	1410	407	214	95	44	556	48
10	43	42	62	56	52	1000	407	188	148	48	455	50
11	38	42	53	51	54	700	303	199	98	44	398	50
12	39	42	57	52	57	620	589	173	73	44	175	48
13	38	50	70	55	60	570	1170	161	68	46	123	48
14	79	107	60	57	60	831	598	234	67	48	100	48
15	51	61	58	55	59	656	422	268	59	49	89	49
16	58	48	57	54	57	514	328	187	52	42	85	48
17	47	70	56	53	55	509	270	153	49	39	184	47
18	44	75	52	53	53	568	231	136	61	38	798	47
19	56	57	52	55	54	966	205	126	81	36	450	47
20	44	49	66	57	57	1300	192	116	83	38	640	47
21	39	42	80	61	66	1040	241	105	86	36	520	46
22	37	39	67	60	100	677	220	98	70	35	290	48
23	70	123	60	58	260	525	187	92	59	36	307	49
24	59	82	61	60	325	525	230	84	54	39	233	48
25	56	58	63	57	225	598	450	80	52	57	166	54
26	99	47	55	55	189	482	1140	76	51	50	136	47
27	64	53	51	53	208	383	1220	75	49	44	164	44
28	51	69	50	52	228	337	923	70	50	42	139	44
29	42	54	54	54	---	401	686	66	107	41	207	45
30	37	61	318	52	---	1320	708	64	296	305	171	44
31	37	---	254	49	---	1570	---	90	---	270	126	---
TOTAL	1674	1674	2744	2333	2689	28382	16057	7573	2653	2024	7925	1590
MEAN	54.0	55.8	88.5	75.3	96.0	916	535	244	88.4	65.3	256	53.0
MAX	100	123	318	306	325	2960	1220	1100	296	305	798	97
MIN	37	33	50	49	46	272	187	64	49	35	85	44
CFSM	.26	.27	.43	.37	.47	4.47	2.61	1.19	.43	.32	1.25	.26
IN.	.30	.30	.50	.42	.49	5.15	2.91	1.37	.48	.37	1.44	.29

CAL YR 1978 TOTAL 62778 MEAN 172 MAX 2510 MIN 31 CFSM .84 IN 11.39
WTR YR 1979 TOTAL 77318 MEAN 212 MAX 2960 MIN 33 CFSM 1.03 IN 14.03

05536340 MIDLOTHIAN CREEK AT OAK FOREST, IL

LOCATION.--Lat 41°36'51", long 87°43'46", in SE¼NW¼ sec.15, T.36 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on Kilbourn Avenue in Oak Forest, and at mile 5.9 (9.5 km).

DRAINAGE AREA.--12.6 mi^2 (32.6 km^2).

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1337: 1951-53. WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.41 ft (189.101 m) National Geodetic Vertical Datum of 1929 (Cook County Highway Department bench mark).

REMARKS.--Records good except those for winter periods, which are poor. Diurnal fluctuation at low flow caused by small industrial plants upstream. Flow bypassed gage from Nov. 21, 1962, to Mar. 2, 1963, due to diversion 1.0 mi (1.6 km) upstream. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--29 years, 10.9 ft^3/s (0.309 m^3/s), 11.75 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 627 ft^3/s (17.8 m^3/s) Apr. 22, 1973, gage height, 7.67 ft (2.338 m); maximum gage height, 9.00 ft (2.743 m) July 13, 1975; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0645	*253	7.16	*4.47	1.362	Apr. 11	2230	157	4.45	3.50	1.067

Minimum daily discharge, 0.46 ft^3/s (0.013 m^3/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.6	2.7	11	1.8	45	61	38	4.5	3.0	4.3	8.0
2	1.3	1.4	2.8	8.0	1.9	43	65	40	4.1	1.9	2.4	5.8
3	2.8	1.3	11	5.0	1.8	70	59	45	3.2	1.6	8.1	4.1
4	2.6	1.3	38	3.4	1.6	195	52	46	3.0	7.1	5.6	3.0
5	2.5	1.2	10	2.5	1.2	185	46	45	7.5	2.3	11	2.6
6	2.2	1.5	5.5	2.2	1.6	193	38	43	4.5	1.2	22	2.2
7	2.2	1.5	4.6	1.9	1.7	173	33	39	18	.94	16	1.9
8	1.9	1.4	4.2	1.6	1.6	160	30	35	14	.63	8.2	1.8
9	1.4	1.3	3.5	1.6	1.5	145	27	33	6.6	.62	52	1.4
10	1.2	1.2	2.7	1.5	1.5	124	24	31	13	.58	37	1.0
11	1.1	1.2	2.3	1.4	1.2	101	39	28	8.0	.59	27	1.4
12	1.1	1.2	2.0	1.5	1.3	72	63	26	4.8	.61	11	1.3
13	1.1	1.3	2.6	1.7	1.8	60	63	23	4.4	.61	5.6	1.2
14	1.2	1.2	2.8	2.0	1.6	69	68	21	3.0	.70	4.2	1.0
15	1.0	1.2	2.2	1.9	1.8	63	63	21	2.2	.90	2.7	.95
16	1.9	1.0	2.0	1.8	1.6	53	56	17	1.8	.61	2.2	.87
17	2.0	2.4	1.8	2.1	1.5	52	48	13	1.5	.58	14	.71
18	1.8	3.0	1.6	1.9	1.2	66	44	9.2	3.6	.57	61	.95
19	1.5	2.8	1.8	2.0	1.4	88	38	8.0	4.1	.55	36	.87
20	1.3	2.4	2.0	2.2	1.6	92	30	7.3	2.6	.59	61	.78
21	1.2	2.2	2.7	2.0	2.6	89	25	6.5	1.8	.58	49	.71
22	1.0	2.1	2.4	2.1	3.5	80	14	6.1	1.6	.49	30	.71
23	2.1	5.1	2.0	2.2	10	69	9.3	6.0	1.5	1.1	34	.57
24	1.8	6.2	1.8	2.4	30	61	10	5.5	1.3	1.3	39	.46
25	2.6	4.8	2.2	2.2	48	53	14	5.2	1.4	1.5	26	.71
26	2.9	3.3	2.1	2.1	56	45	36	4.7	1.3	1.0	15	.71
27	2.7	3.2	1.8	2.0	50	39	40	4.3	1.3	.67	16	.71
28	2.1	3.1	1.5	1.9	47	32	43	4.3	1.4	.59	14	.71
29	1.8	2.8	3.0	1.8	---	46	43	4.5	7.5	.56	24	.71
30	1.6	2.7	42	1.9	---	65	41	4.7	9.6	18	26	.51
31	1.6	---	23	2.0	---	65	---	4.5	---	13	17	---
TOTAL	55.3	66.9	190.6	79.8	278.3	2693	1222.3	624.8	143.1	64.97	681.3	48.34
MEAN	1.78	2.23	6.15	2.57	9.94	86.9	40.7	20.2	4.77	2.10	22.0	1.61
MAX	2.9	6.2	42	11	56	195	68	46	18	18	61	8.0
MIN	1.0	1.0	1.5	1.4	1.2	32	9.3	4.3	1.3	.49	2.2	.46
CFSM	.14	.18	.49	.20	.79	6.90	3.23	1.60	.38	.17	1.75	.13
IN.	.16	.20	.56	.24	.82	7.95	3.61	1.84	.42	.19	2.01	.14

CAL YR 1978 TOTAL 4798.11 MEAN 13.1 MAX 156 MIN .63 CFSM 1.04 IN 14.16
WTR YR 1979 TOTAL 6148.71 MEAN 16.8 MAX 195 MIN .46 CFSM 1.33 IN 18.15

05536500 TINLEY CREEK NEAR PALOS PARK, IL

LOCATION.--Lat 41°38'48", long 87°45'59", in SW¼SE¼ sec.32, T.37 N., R.13 E., Cook County, Hydrologic Unit 07120003, on left bank at downstream side of bridge on 135th Street, 1.5 mi (2.4 km) west of State Highway 50, 3 mi (5 km) southeast of Palos Park, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--11.2 mi^2 (29.0 km^2).

PERIOD OF RECORD.--July 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 607.40 ft (185.136 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--28 years, 9.18 ft^3/s (0.260 m^3/s), 11.13 in/yr (283 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft^3/s (36.0 m^3/s) Apr. 30, 1970, gage height, 9.83 ft (2.996 m); maximum gage height, 10.30 ft (3.139 m) Oct. 10, 1954; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1030	350	9.91	[a]*9.15	2.789	Apr. 12	0230	*615	17.4	7.40	2.256
Mar. 14	0045	371	10.5	5.89	1.795	Apr. 26	0815	262	7.42	5.10	1.554
Mar. 19	0815	370	10.5	5.88	1.792	May 3	0315	306	8.67	5.43	1.655
Mar. 29	2000	332	9.40	5.62	1.713						

[a]Ice jam

Minimum discharge, 0.02 ft^3/s (0.001 m^3/s) July 22-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.26	2.1	9.0	.94	26	64	16	1.1	1.9	4.8	5.6
2	.53	.17	2.0	6.0	.90	30	80	18	1.4	.73	3.1	5.9
3	2.5	.34	24	2.6	1.0	70	52	139	.73	.44	5.9	3.9
4	1.5	.46	34	1.6	.92	250	25	30	.53	4.6	6.2	3.2
5	.86	.28	6.9	1.2	.87	190	18	17	.67	1.4	5.2	2.6
6	.95	1.6	4.2	1.0	.91	100	15	12	1.9	.55	29	2.6
7	.60	3.4	3.8	.90	.97	89	12	9.2	8.1	.27	7.6	2.1
8	.39	.76	3.0	.84	.93	87	20	7.6	6.5	.12	3.9	1.7
9	.22	.46	2.3	.79	.88	120	32	6.7	2.3	.08	57	1.3
10	.17	.28	1.9	.77	.83	100	21	6.2	4.8	.15	30	1.0
11	.22	.22	1.5	.78	.79	80	66	7.4	3.6	.32	19	.76
12	.13	.17	1.2	.85	.99	70	284	6.2	1.4	.10	7.0	.60
13	.08	.46	1.7	.92	1.0	110	62	6.0	1.2	.09	4.7	.76
14	1.2	1.3	1.4	.86	1.0	201	40	8.6	1.3	.09	3.5	.76
15	.53	.60	1.1	.81	.98	76	25	8.7	.76	1.4	2.7	.86
16	.86	.39	1.0	.78	.92	43	18	6.1	.46	.60	2.1	.76
17	1.7	4.3	.92	.84	.87	68	14	5.0	.34	.15	7.6	.68
18	.60	7.7	.88	.95	.97	165	12	4.0	.39	.06	82	.46
19	.71	2.2	.87	.87	1.1	252	11	3.7	2.1	.04	23	.39
20	.79	1.4	.98	.93	1.0	98	12	3.4	2.8	.03	51	.39
21	.46	1.1	1.9	.84	1.2	50	16	2.9	1.4	.03	21	.39
22	.24	.98	1.4	.90	1.7	32	13	2.6	.76	.02	23	.34
23	2.6	16	1.1	1.0	3.0	36	9.5	2.2	.46	.02	58	.28
24	1.4	5.5	.94	1.3	15	38	11	1.8	.53	.02	26	.22
25	.86	2.7	1.3	1.1	30	26	20	1.9	.34	.02	13	.17
26	14	1.6	.95	1.0	27	18	110	1.6	.17	.02	8.8	.22
27	2.1	1.7	.87	.93	26	15	58	1.5	.13	.05	11	.22
28	.80	3.4	.92	1.0	24	18	61	1.5	.34	.06	8.8	.28
29	.42	2.1	1.1	1.1	---	121	36	1.2	4.8	.06	33	.46
30	.38	2.5	38	1.1	---	128	33	1.2	7.4	28	16	.39
31	.28	---	20	1.0	---	89	---	1.1	---	13	8.4	---
TOTAL	38.61	64.33	164.23	44.56	146.67	2796	1250.5	340.3	58.71	54.42	582.3	39.29
MEAN	1.25	2.14	5.30	1.44	5.24	90.2	41.7	11.0	1.96	1.76	18.8	1.31
MAX	14	16	38	9.0	30	252	284	139	8.1	28	82	5.9
MIN	.08	.17	.87	.77	.79	15	9.5	1.1	.13	.02	2.1	.17
CFSM	.11	.19	.47	.13	.47	8.05	3.72	.98	.18	.16	1.68	.12
IN.	.13	.21	.55	.15	.49	9.29	4.15	1.13	.19	.18	1.93	.13

CAL YR 1978 TOTAL 3670.55 MEAN 10.1 MAX 514 MIN .08 CFSM .90 IN 12.19
WTR YR 1979 TOTAL 5579.92 MEAN 15.3 MAX 284 MIN .02 CFSM 1.37 IN 18.53

05536700 CALUMET SAG CHANNEL AT SAG BRIDGE, IL

LOCATION.--Lat 41°41'45", long 87°56'11", in SE¼NE¼ sec.14, T.37 N., R.11 E., Cook County, Hydrologic Unit 07120003, at bridge on State Highway 83, 0.5 mi (0.8 km) northwest of Sag Bridge and at mile 0.9 (1.4 km).

DRAINAGE AREA.--389 mi^2 (1,008 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1965-77 are published in Water-Resources Investigations 78-22 and 79-23 as site H 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT									
30...	0800	17002	17002	1040	7.7	8.0	13.5	.9	28
DEC									
05...	0900	17002	17002	--	7.0	3.0	5.0	3.2	59
05...	1100	17002	17002	--	6.7	2.0	5.0	3.1	51
FEB									
23...	0800	17002	17002	1480	7.1	4.5	4.0	2.1	70
MAR									
26...	1600	17002	17002	840	7.1	-.5	6.0	2.4	47
APR									
05...	0700	17002	17002	910	--	--	7.0	2.9	44
19...	0700	17002	17002	1110	7.7	9.0	11.0	2.2	16
MAY									
09...	0700	17002	17002	1140	8.1	23.5	19.0	.0	44
JUN									
05...	1600	17002	17002	--	--	21.0	24.5	--	44
JUL									
19...	0700	17002	17002	850	7.5	22.0	22.0	.0	20
19...	0800	17002	17002	900	7.6	23.5	23.0	.0	48
AUG									
15...	1300	17002	17002	725	7.5	18.5	22.0	.3	28
SEP									
13...	1000	17002	17002	700	7.2	20.0	22.0	1.0	24

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
OCT								
30...	E300000	--	--	--	--	1.1	5.2	1.0
DEC								
05...	1700	195	230	94	--	1.0	15	2.0
05...	1700	190	225	66	--	1.0	15	1.8
FEB								
23...	7500	175	175	71	25	.70	12	3.3
MAR								
26...	--	170	150	77	22	1.9	3.8	--
APR								
05...	38000	145	95	69	2	2.1	2.6	--
19...	3000	165	120	16	2	1.4	4.3	--
MAY								
09...	9900	170	120	59	12	1.4	4.3	--
JUN								
05...	--	220	180	21	6	1.2	12	--
JUL								
19...	2800	105	67	13	3	.30	6.1	--
19...	3200	105	70	130	27	.30	6.2	--
AUG								
15...	13000	105	67	44	14	.30	4.7	--
SEP								
13...	440	99	67	21	5	.60	4.8	--

E Estimated.

05536700 CALUMET SAG CHANNEL AT SAG BRIDGE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
30...	0	--	0	0	20	--	--	--	--	.05	4
DEC											
05...	0	--	0	0	20	20	200	.0	200	.04	3
05...	0	--	0	0	20	20	180	.0	100	.04	3
FEB											
23...	0	500	0	20	20	30	60	.0	100	.05	2
MAR											
26...	--	400	--	--	20	50	--	.0	--	.03	--
APR											
05...	--	300	--	--	0	20	--	.0	--	--	2
19...	--	400	--	--	20	0	--	.0	--	--	1
MAY											
09...	0	--	0	0	0	0	--	.0	--	--	1
JUN											
05...	--	500	--	--	0	0	--	.1	--	--	1
JUL											
19...	3	300	--	0	10	0	--	.0	0	.01	0
19...	3	300	--	20	20	80	--	.0	200	.01	1
AUG											
15...	--	300	--	--	10	0	--	--	--	.01	2
SEP											
13...	--	200	--	--	0	0	--	--	--	.01	0

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL

LOCATION.--Lat 41°34'11", long 88°04'42", in SW¼ sec.27, T.36 N., R.10 E., Will County, Hydrologic Unit 07120004, at upper end of 9-foot (2.7 m) navigation channel at Lockport Lock and Power Plant on Chicago Sanitary and Ship Canal, 1.1 mi (1.8 km) upstream from Des Plaines River, and 1.7 mi (2.7 km) southwest of Lockport.

DRAINAGE AREA.--740 mi^2 (1,917 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1900 to current year. Prior to October 1936 monthly discharge only, published in WSP 1308.

REVISED RECORDS.--WSP 955: 1940-41(m). WSP 1005: 1943. WSP 1175: 1945. WSP 1308: 1948-50(M). WSP 1728: 1951-53(M).

GAGE.--Discharge computed from flow through turbines, sluice gates, locks, leakage, and over dam.

REMARKS.--Daily total discharge includes governmental and private pumpage, inflow from Des Plaines River basin, and diversion from Lake Michigan. This total is obtained by adding the daily discharges, based on half-hourly discharge readings at dams, sluice gates, lockages, exciter turbines in operation and main turbines in operation as corrected for variable efficiencies, and the leakage of lock gates, dams, sluice gates, and turbines not in operation.

Domestic pumpage is the amount of pumpage from Lake Michigan and any such ground sources supplied by infiltration from Lake Michigan by the State of Illinois and its municipalities, political subdivisions, agencies, and instrumentalities, the sewage and sewage effluent derived from which enters the Sanitary and Ship Canal above Lockport.

Total diversion is total amount of water diverted from Lake Michigan by the State of Illinois and its municipalities, political subdivisions, agencies, and instrumentalities.

Direct diversion and storm runoff is the amount of water diverted into the Sanitary and Ship Canal directly from Lake Michigan and as storm runoff from the Lake Michigan watershed.

The Supreme Court of the United States, in its Decree of June 12, 1967, limited the total Illinois diversion of water from Lake Michigan to an annual average of 3,200 ft^3/s (90.6 m^3/s); this includes water diverted from the Lake for domestic consumption, for navigation and waste dilution purposes, plus that which is diverted as surface runoff and ground-water base flow. This Decree became effective on March 1, 1970, and it superseded the Decree of April 21, 1930, and subsequent Federal permit of June 26, 1930, issued by the Secretary of War.

COOPERATION.--Records furnished by the Metropolitan Sanitary District of Greater Chicago.

AVERAGE DISCHARGE.--79 years, 5,326 ft^3/s (150.8 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum total discharge, 34,948 ft^3/s (990 m^3/s) May 16, 1974; minimum total, 79 ft^3/s (2.24 m^3/s) Jan. 1, 1971, Feb. 28, 1973.

EXTREMES FOR CURRENT YEAR. Maximum total discharge, 34,215 ft^3/s (969 m^3/s) Mar. 4; minimum total, 1,040 ft^3/s (29.5 m^3/s) Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

	OCTOBER			NOVEMBER			DECEMBER		
DAY	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION
1	3086	1521	2946	1778	1548	1631	2186	1499	2058
2	3829	1646	3682	1552	1560	1406	1793	1468	1657
3	2655	1628	2433	1704	1552	1559	3970	1420	3769
4	2028	1617	1828	1837	1529	1711	2594	1530	2420
5	2886	1602	2658	1746	1480	1625	2413	1538	2252
6	2344	1583	2150	2389	1532	2176	2322	1535	2178
7	2128	1530	1949	1748	1551	1590	1735	1519	1593
8	2137	1442	1993	1538	1557	1384	2275	1522	2131
9	2540	1595	2374	1958	1562	1810	1792	1474	1654
10	2328	1589	2106	1616	1556	1480	1700	1448	1567
11	2564	1592	2382	1700	1484	1573	1931	1550	1800
12	3014	1583	2845	2016	1426	1891	2085	1553	1819
13	2285	1566	2126	2323	1531	1977	2123	1556	1886
14	3015	1502	2874	1856	1540	1626	1976	1556	1766
15	3041	1441	2903	1718	1535	1532	1781	1555	1593
16	2574	1546	2372	2270	1534	2114	1705	1494	1520
17	1818	1569	1672	2339	1511	1999	2025	1459	1870
18	1878	1561	1736	1734	1478	1562	1840	1547	1700
19	1814	1571	1684	1557	1430	1425	1985	1547	1822
20	2108	1583	1979	1884	1506	1720	2271	1547	2104
21	2113	1554	1985	1775	1518	1604	2389	1547	2247
22	2053	1472	1922	1732	1534	1535	1808	1535	1669
23	3077	1557	2859	3229	1418	2854	1646	1465	1509
24	2304	1566	2173	1824	1427	1642	2103	1434	1964
25	2424	1555	2190	1598	1429	1439	2240	1405	2106
26	2896	1566	2723	1786	1406	1646	1633	1465	1456
27	2521	1550	2381	2203	1511	2046	1822	1515	1630
28	2511	1502	2374	2433	1529	2276	2307	1501	2145
29	2513	1490	2381	1851	1517	1707	2453	1484	2208
30	3317	1554	3180	2054	1542	1910	5071	1444	4650
31	4303	1563	4153	-	-	-	2581	1408	2270

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	JANUARY			FEBRUARY			MARCH		
DAY	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION
1	2463	1386	2210	2226	1585	2017	3458	1571	2919
2	2384	1501	2129	1909	1579	1698	3897	1574	3337
3	2423	1536	2174	1932	1538	1728	8594	1535	7873
4	2375	1549	2117	1906	1501	1746	29787	1498	27794
5	2410	1529	2118	1794	1576	1586	29681	1578	26692
6	2322	1515	2023	1819	1590	1607	21693	1591	19849
7	2283	1478	2023	2052	1590	1854	15439	1578	13846
8	2204	1547	2027	1875	1588	1688	10380	1592	9150
9	2233	1563	2050	1891	1586	1700	12932	1585	11757
10	1959	1574	1786	1814	1551	1650	10663	1548	9595
11	2000	1566	1822	1847	1511	1691	4496	1500	3578
12	1943	1555	1779	1821	1593	1629	3482	1580	2735
13	1826	1510	1662	2099	1590	1928	4597	1586	3882
14	2335	1496	2178	2054	1590	1905	5527	1588	4610
15	2104	1564	1948	1699	1580	1544	4572	1580	3790
16	1828	1574	1670	1950	1576	1791	3560	1582	2885
17	2152	1583	1991	1818	1556	1675	4530	1526	3804
18	2212	1574	1989	1679	1494	1537	6732	1493	5960
19	1848	1555	1630	1974	1583	1829	13390	1586	12288
20	1850	1526	1617	2080	1585	1884	12008	1586	10851
21	2363	1507	2156	2857	1577	2530	7194	1572	6249
22	1950	1580	1776	3590	1576	3278	5961	1580	5200
23	1793	1584	1564	4319	1579	3782	3442	1572	2736
24	2162	1566	1941	4296	1538	3804	4944	1516	4183
25	2234	1577	2029	3228	1497	2770	4259	1459	3487
26	1619	1575	1414	3137	1577	2641	3523	1557	2880
27	2115	1527	1907	3052	1582	2500	3244	1566	2645
28	1802	1507	1579	3413	1586	2862	3871	1552	3291
29	2331	1575	2081	-	-	-	11763	1540	10896
30	1929	1597	1704	-	-	-	10392	1552	9097
31	1956	1602	1735	-	-	-	7778	1486	6724

	APRIL			MAY			JUNE		
DAY	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION	DAILY TOTAL	DOMESTIC PUMPAGE	TOTAL DIVERSION
1	6413	1444	5649	2751	1558	2057	1831	1809	1641
2	4906	1532	4076	6586	1579	5950	2173	1889	1988
3	4505	1541	3712	9515	1559	8570	2282	1876	2118
4	4653	1529	4029	5338	1550	4507	3066	2041	2868
5	3128	1540	2603	4291	1518	3609	2319	1818	2123
6	2926	1534	2450	3037	1479	2443	3599	1970	3407
7	3092	1476	2652	3217	1627	2694	5041	1810	4718
8	3766	1444	3329	3162	1723	2674	5224	1812	4860
9	2895	1537	2463	2584	1808	2131	3602	1642	3241
10	2729	1543	2352	3205	1836	2792	3708	1529	3406
11	10050	1538	9528	4020	1668	3564	3239	1741	3015
12	16841	1545	15573	2827	1539	2463	4826	1739	4598
13	6516	1495	5440	2814	1486	2444	2869	1753	2648
14	4393	1464	3666	3264	1593	2873	4421	1985	4196
15	3681	1410	3100	2190	1609	1782	3742	2152	3529
16	3154	1538	2679	2820	1644	2480	3485	2104	3297
17	3046	1551	2587	2370	1677	2048	2824	1783	2670
18	2709	1558	2305	2517	1750	2219	4407	1688	4125
19	2951	1557	2561	2892	1613	2609	2634	1738	2351
20	2627	1558	2294	1903	1581	1681	3100	1858	2820
21	2396	1494	2010	2495	1646	2302	2830	2055	2593
22	2454	1473	2131	2273	1716	2022	3527	1985	3303
23	2476	1585	2172	2374	1661	2127	3811	1676	3628
24	3152	1579	2749	2060	1635	1819	2148	1674	1976
25	5183	1588	4686	2039	1663	1822	3007	1908	2846
26	7013	1546	5981	2423	1644	2231	2687	2035	2494
27	7135	1551	6148	1792	1623	1621	2703	2092	2505
28	3935	1470	3081	2126	1677	1916	3333	2033	3114
29	4838	1379	4113	2277	1838	2134	10696	1764	10205
30	4747	1507	3982	2139	1793	2002	5773	1611	5367
31	-	-	-	2459	1795	2238	-	-	-

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	JULY DAILY TOTAL	JULY DOMESTIC PUMPAGE	JULY TOTAL DIVERSION	AUGUST DAILY TOTAL	AUGUST DOMESTIC PUMPAGE	AUGUST TOTAL DIVERSION	SEPTEMBER DAILY TOTAL	SEPTEMBER DOMESTIC PUMPAGE	SEPTEMBER TOTAL DIVERSION
1	2570	1572	2326	4430	1754	4262	5060	1687	4828
2	3126	1747	2936	4028	1858	3866	4503	1625	4327
3	5116	1813	4924	4673	1903	4455	3460	1620	3305
4	2848	1573	2642	4874	1810	4696	3963	1769	3811
5	3389	1722	3202	6900	1651	6730	3318	1831	3138
6	3258	1798	3074	4466	1861	4105	4129	1828	3953
7	3239	1810	3056	3942	2222	3664	3224	1726	3049
8	2749	1665	2576	4479	2101	4184	2811	1611	2647
9	3062	1887	2869	7934	2086	7418	3004	1600	2857
10	3798	1996	3595	9846	1869	9241	2822	1820	2692
11	3347	2107	3144	4502	1679	3968	2493	1914	2363
12	4499	2154	4294	4234	1620	3944	2528	1913	2396
13	4591	2095	4388	3653	1751	3442	2770	1780	2639
14	5610	1782	5416	3383	1756	3179	3152	1701	3021
15	3415	1815	3233	3906	1750	3708	3481	1693	3351
16	3483	1935	3334	3470	1778	3293	3296	1678	3164
17	4403	1904	4209	7814	1742	7580	3411	1832	3281
18	3129	2005	2937	8552	1666	8100	4298	1860	4105
19	4203	2098	4014	6550	1611	6254	4600	1766	4419
20	3193	2172	2990	5646	1784	5274	4714	1784	4552
21	3790	2099	3621	4034	1829	3715	4438	1707	4274
22	3388	1860	3220	6620	1835	6403	3340	1675	3187
23	3108	2214	2929	5402	1849	5163	3735	1628	3603
24	4578	2102	4397	4278	1772	4093	3499	1726	3342
25	2556	1903	2380	4140	1691	3974	3469	1788	3309
26	3194	1918	3026	4307	1606	4104	3585	1839	3410
27	4957	2084	4799	3817	1747	3655	3478	1873	3299
28	3785	1846	3410	3466	1770	3315	3653	1865	3479
29	2622	1821	2262	6417	1788	6136	3701	1854	3554
30	11707	1904	11380	3168	1844	2875	3738	1672	3609
31	3836	1886	3552	4219	1864	3949	-	-	-

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WITH DIRECT DIVERSION AND STORM RUNOFF, DOMESTIC PUMPAGE, AND TOTAL DIVERSION FROM LAKE MICHIGAN WATERSHED THROUGH SANITARY DISTRICT AT LOCKPORT, IL.
WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONTH	TOTAL DISCHARGE MAXIMUM DAILY	TOTAL DISCHARGE MINIMUM DAILY	TOTAL DISCHARGE MEAN	MEAN DIRECT DIVERSION AND STORM RUNOFF	DOMESTIC PUMPAGE MEAN	TOTAL DIVERSION MAXIMUM DAILY	TOTAL DIVERSION MINIMUM DAILY	TOTAL DIVERSION MEAN
OCTOBER	4303	1814	2584	835	1555	4153	1672	2420
NOVEMBER	3229	1538	1930	210	1508	2854	1384	1748
DECEMBER	5071	1633	2211	497	1501	4650	1456	2033
CALENDAR YEAR 1978	19965	1538	3309	1373	1641	19467	1384	3044
JANUARY	2463	1619	2110	318	1544	2210	1414	1898
FEBRUARY	4319	1679	2362	500	1566	3804	1537	2113
MARCH	29787	3244	8896	6278	1555	27794	2645	7890
APRIL	16841	2396	4610	2431	1517	15573	2010	4003
MAY	9515	1792	3089	1014	1648	8570	1621	2704
JUNE	10696	1831	3630	1499	1852	10205	1641	3388
JULY	11707	2556	3889	1734	1912	11380	2262	3682
AUGUST	9846	3168	5069	2950	1802	9241	2875	4798
SEPTEMBER	5060	2493	3589	1642	1756	4828	2363	3432
WATER YEAR 1978-79	29787	1538	3664	1659	1643	27794	1384	3342

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GI 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
30...	1000	17002	17002	3320	770	7.5	9.5	17.0	2.0	52
NOV										
30...	1300	17002	17002	2050	1080	--	-4.0	11.0	3.7	36
30...	1400	17002	17002	2050	1060	--	-5.5	11.0	--	36
DEC										
22...	1000	17002	17002	1810	1260	7.5	1.5	13.0	4.2	35
FEB										
06...	1600	17002	17002	1820	1120	7.4	-9.0	5.0	4.5	27
MAR										
01...	1000	17002	17002	3460	1540	8.1	2.0	--	3.2	44
26...	1300	17002	17002	3520	790	7.1	.5	10.0	4.1	36
APR										
11...	1000	17002	17002	10050	1010	--	6.0	10.5	3.8	52
MAY										
10...	1000	17002	17002	3200	980	7.3	28.5	21.0	.4	40
JUN										
05...	0900	17002	17002	2320	--	--	26.0	23.5	--	32
JUL										
10...	0900	17002	17002	3800	700	7.4	26.5	25.0	1.0	24
10...	1000	17002	17002	3800	700	7.1	26.5	25.0	1.3	28
AUG										
15...	0900	17002	17002	3910	725	7.5	15.5	25.0	.4	24
SEP										
13...	1200	17002	17002	2770	800	7.1	21.5	25.0	1.5	16

05537000 CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)
OCT										
30...	91	160	125	--	--	2.8	8.9	--	0	--
NOV										
30...	--	105	125	--	--	2.1	9.3	--	0	--
30...	--	105	135	--	--	1.9	9.4	--	0	--
DEC										
22...	150	130	180	--	--	3.2	7.1	1.2	0	--
FEB										
06...	--	120	177	--	--	1.9	6.8	.96	0	--
MAR										
01...	7200	120	275	21	6	1.6	4.8	--	0	--
26...	--	125	135	24	13	.90	2.8	--	0	--
APR										
11...	--	130	130	60	16	1.8	6.5	--	0	--
MAY										
10...	600	130	97	23	7	3.0	2.7	--	0	--
JUN										
05...	--	120	120	4	--	2.2	6.3	--	0	--
JUL										
10...	310	83	67	12	7	1.6	4.1	--	--	--
10...	260	87	68	18	6	2.0	4.3	--	0	--
AUG										
15...	8000	83	70	12	9	3.4	2.1	--	3	300
SEP										
13...	99	94	75	15	5	2.4	4.3	--	2	300

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
30...	0	0	20	20	--	--	--	--	1
NOV									
30...	0	0	20	20	100	.0	100	.02	2
30...	0	0	0	10	100	.0	100	.02	2
DEC									
22...	0	0	20	10	0	.0	200	.01	3
FEB									
06...	0	0	20	20	--	.0	100	--	2
MAR									
01...	0	0	10	20	--	.0	--	.02	2
26...	0	20	20	30	--	.0	--	.01	1
APR									
11...	0	30	20	0	--	.0	--	.01	0
MAY									
10...	0	0	0	0	--	.0	--	--	1
JUN									
05...	0	0	0	0	--	.0	--	.00	2
JUL									
10...	--	--	--	--	--	.0	--	--	2
10...	0	10	10	0	--	.0	--	--	1
AUG									
15...	0	0	10	0	--	.0	--	.00	1
SEP									
13...	0	0	0	0	--	.0	--	.01	0

05537500 LONG RUN NEAR LEMONT, IL

LOCATION.--Lat 41°38'33", long 87°59'57", in SW¼SE¼ sec. 32, T.37 N., R.11 E., Cook County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Street, 2 mi (3 km) south of Lemont, and at mile 5.4 (8.7 km).

DRAINAGE AREA.--20.9 mi^2 (54.1 km^2).

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 637.20 ft (194.219 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--28 years, 15.9 ft^3/s (0.450 m^3/s), 10.33 in/yr (262 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,160 ft^3/s (89.5 m^3/s) Oct. 10, 1954, gage height, 9.91 ft (3.021 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 260 ft^3/s (7.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1100	*530	15.0	[a]*8.10	2.469	Mar. 29	1815	315	8.92	5.73	1.747
Mar. 19	0745	418	11.8	6.16	1.878	Apr. 12	0315	486	13.8	6.40	1.951

[a]Ice jam

Minimum daily discharge, 0.23 ft^3/s (0.007 m^3/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	.46	2.2	8.0	2.4	40	87	44	6.7	1.0	4.2	5.1
2	.38	.46	2.2	5.5	2.4	42	81	37	3.2	.69	2.4	4.0
3	.73	.50	5.8	4.0	2.3	60	60	154	2.4	.64	4.4	2.8
4	.79	.50	11	3.0	2.3	400	48	89	2.6	2.7	2.8	2.6
5	.76	.50	5.1	2.4	2.2	300	40	51	2.8	1.5	6.7	2.1
6	1.0	.64	3.2	2.1	2.2	210	32	37	2.6	.79	64	1.8
7	.64	.89	2.9	1.9	2.1	180	27	27	5.5	.64	12	1.4
8	.54	.69	2.4	1.7	2.0	160	28	22	6.5	.59	5.4	1.2
9	.59	.59	2.0	1.6	1.9	140	33	19	4.9	.74	37	1.0
10	.64	.54	1.7	1.6	1.8	110	27	17	7.6	.64	32	1.0
11	.69	.54	1.6	1.5	1.8	90	82	20	6.6	.50	19	1.0
12	.69	.64	1.7	1.6	1.8	82	299	16	3.1	.50	8.6	.94
13	.69	.79	2.0	1.7	1.9	92	137	14	2.3	.54	4.9	.84
14	.69	.89	1.9	2.1	1.9	144	78	14	2.1	.54	3.3	.84
15	.74	.69	1.8	2.0	1.9	102	53	16	1.6	.89	2.4	.84
16	.89	.54	1.7	1.9	1.9	79	42	12	1.3	.64	1.8	.84
17	1.1	.94	1.6	2.1	1.8	106	34	9.9	1.3	.46	3.1	.79
18	1.0	1.7	1.5	2.0	1.9	190	28	8.4	1.5	.43	92	.84
19	1.3	1.2	1.5	1.8	2.0	324	23	7.5	2.2	.39	39	.79
20	.46	.94	1.5	1.9	2.0	187	21	7.1	1.5	.30	71	.84
21	.33	1.0	2.0	2.0	2.8	119	20	6.0	1.2	.23	47	.79
22	.39	1.0	1.8	2.2	4.0	85	18	5.6	.89	.33	37	.84
23	.54	4.2	1.7	2.8	5.0	77	17	4.8	.84	.36	43	1.2
24	1.1	3.7	1.8	3.4	10	92	19	5.4	.79	.36	30	1.1
25	1.3	2.2	1.9	2.9	20	68	31	4.6	.74	.39	18	.74
26	1.5	1.9	1.8	2.6	46	50	105	4.4	.59	.54	12	.54
27	.89	1.9	1.7	2.4	50	42	93	3.7	.69	.39	10	.50
28	.89	2.2	1.7	2.3	45	40	103	3.2	.64	.36	8.6	.54
29	.54	2.1	1.9	2.5	---	143	72	2.7	.89	.39	18	.79
30	.46	2.1	14	2.7	---	172	71	2.5	2.0	39	14	.64
31	.50	---	11	2.5	---	143	---	2.5	---	27	7.7	---
TOTAL	23.34	36.94	96.6	78.7	223.3	4069	1809	667.3	77.57	84.47	661.3	39.24
MEAN	.75	1.23	3.12	2.54	7.98	131	60.3	21.5	2.59	2.72	21.3	1.31
MAX	1.5	4.2	14	8.0	50	400	299	154	7.6	39	92	5.1
MIN	.33	.46	1.5	1.5	1.8	40	17	2.5	.59	.23	1.8	.50
CFSM	.04	.06	.15	.12	.38	6.27	2.89	1.03	.12	.13	1.02	.06
IN.	.04	.07	.17	.14	.40	7.24	3.22	1.19	.14	.15	1.18	.07

CAL YR 1978 TOTAL 5717.15 MEAN 15.7 MAX 537 MIN .22 CFSM .75 IN 10.18
WTR YR 1979 TOTAL 7866.76 MEAN 21.6 MAX 400 MIN .23 CFSM 1.03 IN 14.00

05539000 HICKORY CREEK AT JOLIET, IL

LOCATION.--Lat 41°31'10", long 88°04'10", in SW¼NE¼ sec.15, T.35 N., R.10 E., Will County, Hydrologic Unit 07120004, on right bank at Third Avenue in Joliet, 0.2 mi (0.3 km) downstream from Spring Creek, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--107 mi^2 (277 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 526.00 ft (160.325 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1946, nonrecording gage at same site at datum 1.00 ft (0.305 m) higher. Oct. 9, 1946, to Sept. 30, 1974, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--35 years, 83.0 ft^3/s (2.351 m^3/s), 10.53 in/yr (267 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft^3/s (430 m^3/s) July 13, 1957, gage height, 13.77 ft (4.197 m), present datum, from rating curve extended above 6,300 ft^3/s (178 m^3/s); minimum, 0.5 ft^3/s (0.014 m^3/s) Aug. 9, 16, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0400	ice jam		*8.36	2.548	Mar. 19	0945	2420	68.5	5.75	1.753
Mar. 4	2300	2250	63.7	5.55	1.692	Apr. 12	0615	*2750	77.9	6.12	1.865

Minimum daily discharge, 5.2 ft^3/s (0.15 m^3/s) July 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.7	16	63	6.2	200	395	224	31	22	22	42
2	7.3	9.3	12	30	5.9	270	476	188	22	16	18	35
3	10	9.3	24	20	6.9	500	347	962	21	20	35	28
4	9.0	9.9	56	14	6.0	1880	244	422	18	58	34	24
5	9.1	10	32	11	5.7	1710	193	246	22	25	76	20
6	8.6	13	20	9.7	6.5	1120	146	176	18	19	317	18
7	8.0	12	22	8.2	7.7	1020	127	131	36	15	105	16
8	7.6	12	25	7.4	6.9	959	123	107	48	14	55	15
9	7.5	12	19	6.9	6.0	1090	154	107	31	15	351	15
10	7.0	12	16	6.5	5.5	703	129	86	32	12	198	12
11	6.9	11	12	6.3	5.6	442	340	78	31	12	116	12
12	7.0	10	14	7.0	6.4	360	2040	68	23	11	70	11
13	6.9	12	17	7.6	6.7	386	712	62	21	10	41	10
14	7.2	11	15	8.5	6.6	818	351	80	19	16	30	9.3
15	7.1	11	14	7.3	6.4	450	224	111	17	15	22	9.3
16	7.4	10	16	6.5	6.2	345	165	78	15	11	19	8.7
17	7.9	15	19	7.2	6.3	522	128	63	14	9.0	18	8.7
18	8.4	15	24	6.9	6.5	1140	107	57	15	8.9	233	8.2
19	8.9	14	10	6.6	7.0	2100	94	55	20	8.3	190	7.6
20	8.7	12	9.0	7.6	7.4	1210	109	52	18	7.8	485	7.6
21	8.5	12	15	7.2	10	621	84	48	17	7.2	314	7.1
22	9.7	12	20	6.8	16	395	74	44	16	6.6	225	7.1
23	12	21	16	6.2	40	334	67	42	16	6.6	320	7.1
24	8.1	23	10	6.5	160	384	71	40	15	6.1	220	7.1
25	14	15	12	6.8	205	301	131	37	15	7.5	114	6.6
26	15	12	14	6.6	195	211	577	34	15	6.6	76	6.6
27	15	14	13	6.4	182	176	444	34	14	6.1	67	6.6
28	14	12	11	7.0	178	167	488	31	14	5.6	57	6.1
29	11	12	15	6.8	---	676	320	29	31	5.2	74	6.1
30	10	16	80	6.6	---	1260	367	24	34	113	88	6.1
31	9.3	---	59	6.4	---	741	---	27	---	49	58	---
TOTAL	284.1	378.2	657.0	321.5	1114.4	22491	9227	3743	659	544.5	4048	383.9
MEAN	9.16	12.6	21.2	10.4	39.8	726	308	121	22.0	17.6	131	12.8
MAX	15	23	80	63	205	2100	2040	962	48	113	485	42
MIN	6.9	8.7	9.0	6.2	5.5	167	67	24	14	5.2	18	6.1
CFSM	.09	.12	.20	.10	.37	6.79	2.88	1.13	.21	.16	1.22	.12
IN.	.10	.13	.23	.11	.39	7.82	3.21	1.30	.23	.19	1.41	.13

CAL YR 1978 TOTAL 31638.9 MEAN 86.7 MAX 3260 MIN 6.6 CFSM .81 IN 11.00
WTR YR 1979 TOTAL 43851.6 MEAN 120 MAX 2100 MIN 5.2 CFSM 1.12 IN 15.25

05539000 HICKORY CREEK AT JOLIET, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979. Additional chemical data for water years 1968-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GG 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
04...	1125	80010	--	9.2	--	--	17.5	16.0	--
31...	1130	80010	--	9.7	--	--	15.0	13.0	--
DEC									
18...	1500	80010	--	24	--	--	5.0	1.5	--
JAN									
24...	1215	80010	--	5.0	--	--	-6.0	.0	--
MAR									
07...	1500	80010	--	978	--	--	1.5	1.0	--
APR									
25...	1400	80010	--	145	--	--	13.0	11.5	--
MAY									
31...	0920	80010	--	21	--	--	27.0	20.0	--
JUN									
14...	0800	17002	17002	18	--	--	21.0	20.0	7.5
JUL									
10...	0700	17002	17002	12	1100	7.8	22.0	21.5	7.6
10...	0800	17002	17002	12	1100	7.9	22.0	21.5	7.4
AUG									
15...	0700	17002	17002	24	800	7.9	14.0	16.5	8.6
21...	1240	80010	--	276	--	--	24.5	21.0	--
SEP									
17...	1300	17002	17002	8.7	1100	8.5	24.5	17.0	13.6

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
JUN									
14...	20	3900	140	110	44	12	2.1	.23	.53
JUL									
10...	28	7900	155	135	9	--	2.0	.12	--
10...	24	7700	155	140	8	--	4.8	.12	--
AUG									
15...	24	5200	115	87	46	14	3.0	.10	--
SEP									
17...	24	4400	165	140	15	11	1.2	.04	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
JUN											
14...	0	0	0	0	600	0	180	.0	0	.00	1
JUL											
10...	0	0	0	0	--	0	--	.0	0	.00	0
10...	0	0	0	0	--	0	--	.0	0	.00	0
AUG											
15...	--	--	--	--	--	0	--	--	--	--	1
SEP											
17...	--	--	--	--	--	0	--	--	--	--	0

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL

LOCATION.--Lat 41°54'39", long 88°10'44", in SE¼NW¼ sec.35, T.40 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on left bank at downstream side of bridge on State Highway 64, 2 mi (3 km) northeast of West Chicago, and at mile 49.2 (79.2 km).

DRAINAGE AREA.--28.5 mi^2 (73.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area. WDR IL-77: 1966-67(M).

GAGE.--Water-stage recorder. Datum of gage is 717.76 ft (218.773 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--18 years, 30.1 ft^3/s (0.852 m^3/s), 14.34 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 805 ft^3/s (22.8 m^3/s) June 10, 1967, gage height, 10.36 ft (3.158 m); minimum, 0.2 ft^3/s (0.006 m^3/s) July 1, 5, 8-12, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1215	*779	22.1	*10.25	3.124	Apr. 12	0845	584	16.5	9.14	2.786
Mar. 19	1000	632	17.9	9.38	2.859	May 3	1000	550	15.6	8.96	2.731
Mar. 30	0230	454	12.9	8.42	2.566						

Minimum daily discharge, 10 ft^3/s (0.28 m^3/s) July 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	25	24	33	22	52	151	96	31	21	19	25
2	35	28	24	31	21	65	245	82	30	16	16	23
3	36	24	25	29	21	90	175	407	30	15	20	22
4	32	26	47	27	25	405	138	171	27	21	15	20
5	30	26	43	26	21	262	113	118	30	18	17	18
6	60	26	39	25	21	229	86	93	31	13	45	19
7	50	37	36	27	21	183	92	79	33	12	31	20
8	41	39	32	28	21	178	78	71	37	12	28	19
9	33	27	40	27	21	216	85	64	38	15	47	19
10	29	24	30	25	21	161	70	59	53	17	206	17
11	28	26	28	23	20	122	74	84	38	16	209	16
12	21	26	26	22	19	92	444	71	28	14	70	18
13	22	39	28	20	18	101	180	57	30	14	47	19
14	21	45	27	24	18	207	123	55	27	16	40	18
15	21	25	26	27	19	128	95	57	21	17	39	14
16	21	23	25	23	18	100	86	51	19	15	33	15
17	28	46	24	23	22	128	76	48	21	14	53	17
18	22	57	23	26	21	230	70	44	30	12	158	18
19	20	35	23	27	24	548	65	42	27	15	84	16
20	23	29	25	28	24	356	60	40	26	14	114	14
21	22	26	35	28	24	223	54	37	22	14	90	16
22	24	23	35	27	27	173	57	31	21	13	72	17
23	28	48	30	26	51	180	56	32	18	14	77	17
24	30	44	27	27	76	191	55	29	17	13	51	15
25	31	34	27	28	66	154	57	31	15	15	41	13
26	38	29	23	22	58	114	150	32	15	14	38	13
27	30	29	26	23	51	110	131	31	15	13	36	15
28	29	30	19	25	51	114	163	30	17	14	35	17
29	28	27	17	25	---	188	106	29	27	10	51	16
30	26	27	31	23	---	371	147	28	30	20	41	13
31	25	---	36	22	---	249	---	29	---	27	27	---
TOTAL	923	950	900	797	822	5920	3482	2128	804	474	1850	519
MEAN	29.8	31.7	29.0	25.7	29.4	191	116	68.6	26.8	15.3	59.7	17.3
MAX	60	57	47	33	76	548	444	407	53	27	209	25
MIN	20	23	17	20	18	52	54	28	15	10	15	13
CFSM	1.05	1.11	1.02	.90	1.03	6.70	4.07	2.41	.94	.54	2.10	.61
IN.	1.20	1.24	1.17	1.04	1.07	7.73	4.54	2.78	1.05	.62	2.41	.68

CAL YR 1978 TOTAL 13916 MEAN 38.1 MAX 301 MIN 11 CFSM 1.34 IN 18.16
WTR YR 1979 TOTAL 19569 MEAN 53.6 MAX 548 MIN 10 CFSM 1.88 IN 25.54

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GBK 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
13...	1110	80010	--	20	--	--	13.0	12.0	--	--	--
NOV											
16...	1600	80010	--	22	--	--	4.5	6.5	--	--	--
DEC											
21...	1230	80010	--	38	--	--	-7.0	2.0	--	--	--
JAN											
23...	0950	80010	--	26	--	--	-14.0	.0	--	--	--
FEB											
08...	1130	80010	--	24	--	--	-3.0	2.0	--	--	--
22...	1300	80010	--	25	--	--	.0	2.0	--	--	--
MAR											
05...	0930	80010	--	266	--	--	-1.5	.0	--	--	--
23...	1045	80010	--	180	--	--	15.0	10.0	--	--	--
MAY											
03...	1430	80010	--	498	--	--	10.0	11.5	--	--	--
JUN											
13...	1310	80010	--	32	--	--	20.0	17.5	--	--	--
18...	1200	17002	17002	33	900	8.1	18.5	18.0	7.0	35	2300
JUL											
18...	1300	17002	17002	11	1400	8.1	23.5	23.5	--	24	--
18...	1400	17002	17002	11	1400	8.1	23.5	23.5	9.2	24	250
27...	0940	80010	--	123	--	--	26.0	22.0	--	--	--
AUG											
13...	1000	17002	17002	46	800	7.7	20.5	19.0	--	67	360
SEP											
12...	0920	80010	--	16	--	--	23.0	20.5	--	--	--
20...	0900	17002	17002	13	1495	8.2	18.0	17.0	9.7	24	300
20...	1000	17002	17002	13	1485	8.1	18.0	17.0	9.1	28	350

05539900 WEST BRANCH DU PAGE RIVER NEAR WEST CHICAGO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666)	ARSENIC TOTAL (UG/L AS AS) (01002)
JUN											
18...	--	--	140	110	180	23	5.0	.23	2.0	--	0
JUL											
18...	.0	300	185	170	44	10	9.0	.06	3.0	--	2
18...	--	--	--	--	43	--	8.5	.06	--	--	0
AUG											
13...	--	--	140	72	62	16	3.0	.15	--	--	--
SEP											
20...	--	--	195	170	24	2	8.0	.06	--	--	--
20...	--	--	190	170	33	4	8.7	.07	--	3.2	--

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
JUN											
18...	500	0	0	10	4200	0	150	.0	0	.00	0
JUL											
18...	--	0	0	10	--	--	--	.0	--	--	--
18...	--	--	0	10	--	--	--	.0	0	.00	1
AUG											
13...	400	--	--	10	--	0	--	--	--	.00	0
SEP											
20...	700	--	--	0	--	0	--	--	--	.00	1
20...	700	--	--	0	--	0	--	--	--	.00	8

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL

LOCATION.--Lat 41°49'22", long 88°10'23", in SW¼NE¼ sec.35, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on right bank 400 ft (122 m) upstream from Warrenville Forest Preserve Dam in Warrenville, 0.6 mi (1.0 km) downstream from Spring Brook, and at mile 38.9 (62.6 km).

DRAINAGE AREA.--90.4 mi^2 (234.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 688.59 ft (209.882 m) National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark).

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--11 years, 98.3 ft^3/s (2.784 m^3/s), 14.77 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft^3/s (56.1 m^3/s) Aug. 26, 1972, gage height, 4.70 ft (1.433 m); minimum daily, 7.8 ft^3/s (0.22 m^3/s) Sept. 14, 1971, Oct. 26, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 11, 1954, reached a stage of 5.54 ft (1.689 m), from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	0100	1440	40.8	4.13	1.259	Apr. 12	1900	1300	36.8	3.97	1.210
Mar. 19	1815	*1740	49.3	*4.46	1.359	May 3	1930	1230	34.8	3.89	1.186
Mar. 30	1515	1010	28.6	3.63	1.106	Aug. 11	0815	768	21.7	3.31	1.009

Minimum daily discharge, 24 ft^3/s (0.68 m^3/s) July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	43	60	84	49	124	512	351	99	61	50	99
2	84	44	52	74	48	132	609	293	70	47	38	80
3	90	45	51	66	47	219	569	1040	61	37	55	68
4	69	40	98	60	52	1020	399	814	54	59	47	61
5	64	48	90	55	46	1150	330	452	59	45	35	53
6	93	77	82	53	44	894	254	338	61	34	176	51
7	108	70	77	57	44	716	235	277	75	29	95	54
8	78	82	69	60	45	620	228	234	93	28	67	51
9	66	69	67	54	45	675	234	203	118	28	93	46
10	51	47	65	50	45	600	204	171	150	34	395	44
11	52	42	60	46	45	430	241	213	115	35	722	39
12	44	45	55	43	44	342	1150	213	79	37	440	39
13	41	81	62	47	41	333	848	162	64	31	213	46
14	39	105	60	54	42	531	469	141	65	35	133	50
15	42	65	62	62	42	449	338	150	55	37	98	42
16	55	49	57	54	44	350	271	126	47	33	79	29
17	53	99	54	54	47	371	240	115	47	31	135	27
18	49	137	52	56	49	585	208	108	69	27	480	34
19	45	91	53	58	50	1410	183	105	73	28	411	37
20	42	73	58	56	51	1330	161	93	63	31	452	30
21	46	63	70	54	54	785	147	87	47	25	446	28
22	35	56	77	52	57	530	134	81	46	24	317	35
23	59	102	80	50	64	464	131	75	38	25	289	33
24	50	114	76	48	126	509	140	78	36	27	214	32
25	53	88	68	52	130	454	160	72	33	35	150	27
26	70	75	58	53	126	343	451	72	32	31	118	27
27	56	74	40	54	125	304	520	72	32	29	106	26
28	51	77	47	53	118	313	557	63	35	69	95	36
29	46	67	62	52	---	498	429	58	86	39	212	38
30	52	64	100	51	---	941	447	59	107	86	215	31
31	42	---	92	51	---	808	---	69	---	86	122	---
TOTAL	1821	2132	2054	1713	1720	18230	10799	6385	2009	1203	6496	1293
MEAN	58.7	71.1	66.3	55.3	61.4	588	360	206	67.0	38.8	210	43.1
MAX	108	137	100	84	130	1410	1150	1040	150	86	722	99
MIN	35	40	40	43	41	124	131	58	32	24	35	26
CFSM	.65	.79	.73	.61	.68	6.50	3.98	2.28	.74	.43	2.32	.48
IN.	.75	.88	.85	.70	.71	7.50	4.44	2.63	.83	.50	2.67	.53

CAL YR 1978 TOTAL 35793 MEAN 98.1 MAX 743 MIN 20 CFSM 1.09 IN 14.73
WTR YR 1979 TOTAL 55857 MEAN 153 MAX 1410 MIN 24 CFSM 1.69 IN 22.99

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year. Additional chemical data for water years 1964-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GBK 05.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	HARDNESS (MG/L AS CACO3) (00900)
OCT												
10...	1235	80010	17003	52	1300	7.9	14.0	14.0	20	7.7	22	440
NOV												
17...	1030	80010	17003	80	1130	7.9	9.5	7.0	11	10.2	22	410
DEC												
15...	0910	80010	17003	62	1550	8.0	.0	.5	5.0	12.4	15	480
JAN												
23...	0840	80010	17003	50	1650	7.6	-3.0	.5	4.0	11.0	14	460
FEB												
08...	1015	80010	--	45	--	--	-13.0	.5	--	--	--	--
22...	1100	80010	17003	55	1940	7.9	.0	.5	4.0	11.5	17	180
MAR												
05...	1215	80010	--	116	--	--	-1.0	.5	--	--	--	--
22...	1035	80010	17003	497	670	7.4	19.5	5.0	31	10.3	11	260
APR												
19...	1100	80010	17003	180	960	7.6	16.0	11.5	27	9.0	14	380
MAY												
10...	0845	80010	17003	166	1020	7.8	23.0	19.0	16	6.2	16	390
JUN												
13...	1115	80010	17003	60	1300	7.5	19.5	18.0	26	5.0	19	410
JUL												
31...	0930	80010	17003	85	930	7.5	25.5	24.5	37	5.0	21	240
AUG												
28...	0930	80010	17003	92	1140	7.7	21.0	19.5	32	6.8	22	400
SEP												
17...	1105	80010	17003	27	1720	7.9	20.0	18.0	18	5.7	18	490

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT											
10...	99	46	110	35	2.3	8.0	280	180	160	.6	11
NOV											
17...	92	43	120	39	2.6	7.5	260	150	160	.6	10
DEC											
15...	110	50	150	40	3.0	7.3	310	160	220	.6	11
JAN											
23...	110	48	160	42	3.2	8.7	310	170	230	.6	12
FEB											
22...	110	48	200	47	4.0	8.6	310	160	310	.6	11
MAR											
22...	62	25	38	24	1.0	3.1	170	76	70	.2	7.8
APR											
19...	90	37	58	25	1.3	3.9	240	130	94	.4	8.1
MAY											
10...	89	40	65	27	1.4	4.2	260	130	110	.4	7.5
JUN											
13...	94	42	110	37	2.4	6.0	280	140	160	.5	11
JUL											
31...	54	24	94	46	2.7	5.8	170	83	140	.5	9.4
AUG											
28...	91	41	91	33	2.0	5.7	270	130	140	.4	12
SEP											
17...	110	51	180	45	3.7	8.9	330	190	250	.8	14

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)
OCT 10...	799	1.09	112	41	6	4.4	20	.07	.24
NOV 17...	755	1.03	163	25	4	4.1	18	.07	.23
DEC 15...	902	1.23	151	17	8	5.1	23	.05	.18
JAN 23...	941	1.28	127	12	4	4.3	19	.16	.54
FEB 22...	1070	1.46	159	9	7	5.1	23	.11	.39
MAR 22...	371	.50	498	46	35	2.8	13	.06	.21
APR 19...	594	.81	289	52	47	2.6	12	.11	.39
MAY 10...	617	.84	277	30	25	2.8	13	.16	.54
JUN 13...	745	1.01	121	59	49	4.1	19	.18	.60
JUL 31...	530	.72	122	68	56	3.0	13	.33	1.1
AUG 28...	696	.95	173	83	70	3.6	16	.22	.72
SEP 17...	1030	1.40	75.1	44	34	5.2	23	.14	.47

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 10...	.00	.23	.30	.93	.93	1.3	1.1	1.2	<100
NOV 17...	.38	.38	.50	.78	1.1	1.1	1.0	.89	<100
DEC 15...	.77	.77	1.0	.62	1.3	1.2	1.2	1.1	<100
JAN 23...	2.2	2.2	2.9	.70	2.9	1.8	1.7	1.7	<100
FEB 22...	2.0	2.0	2.7	.70	2.7	1.7	1.7	1.7	<100
MAR 22...	.15	.31	.40	.47	.62	.32	.21	.34	<100
APR 19...	.38	.46	.60	.78	1.1	.62	.44	.64	<100
MAY 10...	.23	.38	.50	.85	1.0	.78	.61	.78	<100
JUN 13...	.00	.69	.90	1.2	1.1	1.2	1.0	1.0	<100
JUL 31...	.31	.31	.40	1.2	1.5	1.3	1.0	1.2	<100
AUG 28...	.23	.23	.30	1.1	1.3	1.0	.78	.88	<100
SEP 17...	.31	.23	.30	.93	1.2	1.9	1.6	1.9	<100

05540095 WEST BRANCH DU PAGE RIVER NEAR WARRENVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT										
10...	400	400	<5	<5	<5	<5	10	<5	1500	30
NOV										
17...	400	400	10	<5	10	<5	10	10	1000	90
OEC										
15...	400	400	<5	<5	<5	<5	10	<5	400	<10
JAN										
23...	400	400	<5	<5	10	<5	10	<5	400	90
FEB										
22...	400	400	<5	<5	<5	<5	10	<5	400	20
MAR										
22...	100	100	10	10	<5	<5	10	10	1800	50
APR										
19...	200	200	<5	<5	10	10	20	10	2000	40
MAY										
10...	200	200	<5	<5	10	10	20	10	1100	20
JUN										
13...	300	300	<5	<5	<5	<5	10	10	1800	10
JUL										
31...	400	300	<5	<5	10	<5	10	10	2200	30
AUG										
28...	300	300	<5	<5	10	<5	10	10	2600	20
SEP										
17...	600	600	<5	<5	<5	<5	20	10	1300	<10

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
10...	<50	<50	10	90	60	<50	<5	740	60	10
NOV										
17...	<50	<50	10	60	50	<50	<5	680	10	10
OEC										
15...	100	100	20	60	60	<50	<5	710	40	40
JAN										
23...	<50	<50	20	110	90	<50	<5	850	40	20
FEB										
22...	30	<50	10	90	90	90	<5	910	30	30
MAR										
22...	100	100	<5	50	30	<10	<5	190	30	10
APR										
19...	30	<50	10	80	70	<10	<5	380	40	20
MAY										
10...	10	<50	10	80	60	<10	<5	430	30	20
JUN										
13...	10	<50	10	150	140	<10	<5	610	30	10
JUL										
31...	10	<50	10	110	70	<10	<5	490	30	10
AUG										
28...	10	<50	10	90	70	<10	<5	590	40	10
SEP										
17...	10	<50	20	100	90	10	<5	930	50	20

05540210 EAST BRANCH DU PAGE RIVER AT ROUTE 34 BRIDGE AT LISLE, IL

LOCATION.--Lat 41°48'02", long 88°04'53", in SE¼ sec.3, T.38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, at bridge on U.S. Highway 34 in Lisle, 0.1 mi (0.2 km) downstream from a small left-bank tributary, 0.3 mi (0.5 km) upstream from Burlington Northern Railroad bridge, and at mile 11.6 (18.7 km).

DRAINAGE AREA.--57.0 mi^2 (147.6 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
13...	1325	80010	--	17	--	--	14.5	15.0	--	--
NOV										
01...	0900	17002	17002	26	1850	7.8	8.0	9.5	5.1	36
01...	1000	17002	17002	26	1900	7.8	9.0	10.0	5.2	28
17...	0840	80010	--	54	--	--	12.0	8.0	--	--
20...	1100	17002	17002	33	1220	7.9	2.0	4.0	7.1	36
DEC										
06...	1400	17002	17002	40	1500	--	-5.0	1.5	10.9	40
19...	1530	80010	--	24	--	--	1.0	6.0	--	--
JAN										
30...	1400	17002	17002	24	1590	7.4	-5.0	2.0	9.3	42
FEB										
07...	1530	80010	--	29	--	--	-15.0	2.5	--	--
MAR										
05...	0900	17002	17002	1350	740	--	-1.5	.0	11.4	35
22...	0900	17002	17002	140	1020	7.8	12.0	6.0	8.2	27
APR										
17...	1100	17002	17002	585	1020	8.3	13.5	11.5	9.8	32
MAY										
03...	1200	80010	--	59	--	--	9.0	12.0	--	--
07...	0800	17002	17002	59	1280	8.2	14.0	15.5	5.2	24
JUN										
13...	0950	80010	--	50	--	--	17.0	17.5	--	--
JUL										
03...	0800	17002	17002	48	1400	7.6	22.0	18.0	2.0	35
27...	1150	80010	--	30	--	--	29.0	22.0	--	--
AUG										
13...	1400	17002	17002	49	850	7.6	24.5	19.0	3.8	32
SEP										
11...	1700	80010	--	32	--	--	24.0	20.5	--	--
17...	0800	17002	17002	29	1500	7.5	15.5	15.0	4.0	28

05540210 EAST BRANCH DU PAGE RIVER AT ROUTE 34 BRIDGE AT LISLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)
NOV										
01...	--	175	268	--	--	3.3	7.6	3.0	--	--
01...	<100	175	273	--	--	3.2	7.8	3.1	--	--
20...	2600	135	190	--	--	2.5	5.4	2.1	--	--
DEC										
06...	<100	145	310	--	--	2.4	4.1	1.7	--	--
JAN										
30...	240	170	290	--	--	5.2	10	3.1	--	--
MAR										
05...	9300	60	115	65	8	4.2	.52	.38	0	500
22...	--	120	130	22	7	3.0	1.0	--	--	300
APR										
17...	1000	160	140	30	12	1.7	1.8	--	--	400
MAY										
07...	260	165	130	21	1	1.7	1.6	--	--	400
JUL										
03...	300	240	210	25	13	2.0	4.9	2.0	--	600
AUG										
13...	9600	110	100	53	12	1.5	.15	--	--	400
SEP										
17...	350	260	210	40	15	3.1	4.8	--	--	500

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
NOV									
01...	--	--	--	0	--	--	--	--	2
01...	--	--	--	0	--	--	--	--	2
20...	--	--	--	0	--	--	--	--	2
DEC									
06...	--	--	0	0	80	--	0	--	2
JAN									
30...	--	0	0	20	110	--	0	--	3
MAR									
05...	0	0	20	30	80	.0	0	.00	1
22...	--	--	20	20	--	.0	--	.00	1
APR									
17...	--	--	20	0	--	--	--	--	1
MAY									
07...	--	--	30	0	--	--	--	.00	1
JUL									
03...	--	--	10	0	--	--	--	--	1
AUG									
13...	--	--	10	0	--	--	--	.00	0
SEP									
17...	--	--	10	0	--	--	--	.00	0

05540290 DU PAGE RIVER NEAR NAPERVILLE, IL

LOCATION.--Lat 41°41'24", long 88°09'58", in NE¼ sec.14, T.37 N., R.9 E., Will County, Hydrologic Unit 07120004, at bridge on Plainfield-Naperville Road, 1.0 mi (1.6 km) downstream from Spring Brook, 1.5 mi (2.4 km) downstream from the confluence of the East and West Branches, 4.0 mi (6.4 km) south of Naperville, and at mile 26.1 (42.0 km).

DRAINAGE AREA.--220 mi^2 (570 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1968-77 are published in Water-Resources Investigations 78-22 and 79-23 as site GB 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
04...	1415	80010	--	129	--	--	15.0	16.5	--	--
11...	1500	17002	17002	--	980	7.9	16.0	15.0	9.2	36
30...	1500	80010	--	92	--	--	20.0	12.0	--	--
NOV										
20...	1200	17002	17002	180	980	8.1	1.5	4.5	10.5	28
DEC										
06...	1000	17002	17002	360	1480	--	-4.0	2.0	12.0	28
06...	1100	17002	17002	220	200	--	-4.0	2.0	12.0	24
18...	0930	80010	--	162	--	--	4.0	3.5	--	--
JAN										
23...	1610	80010	--	122	--	--	-.5	.0	--	--
FEB										
14...	1100	17002	17002	--	1500	7.8	-5.0	.0	11.8	23
MAR										
09...	1230	80010	--	1620	--	--	4.0	.1	--	--
22...	1200	17002	17002	1300	900	7.8	18.5	6.5	9.1	24
APR										
05...	1300	17002	17002	761	910	--	12.0	7.0	9.4	24
17...	0900	17002	17002	579	920	7.8	10.0	10.0	9.4	28
26...	1620	80010	--	885	--	--	9.0	11.0	--	--
MAY										
07...	1100	17002	17002	540	930	7.9	22.0	15.5	6.7	24
30...	1530	80010	--	134	--	--	24.0	21.0	--	--
JUN										
06...	0700	17002	17002	138	--	--	19.5	17.0	3.7	28
JUL										
03...	1100	17002	17002	125	1400	7.9	28.0	22.0	6.7	31
AUG										
13...	1200	17002	17002	440	750	7.8	23.5	21.0	5.6	40
20...	1705	80010	--	783	--	--	26.0	22.0	--	--
SEP										
11...	1200	17002	17002	115	1650	8.0	29.5	21.5	--	21

05540290 DU PAGE RIVER NEAR NAPERVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
OCT								
11...	<100	175	222	--	--	4.6	1.7	--
NOV								
20...	1200	120	150	--	--	3.5	1.7	--
DEC								
06...	360	125	230	--	--	3.5	1.7	1.2
06...	730	125	220	--	--	4.0	1.6	1.2
FEB								
14...	730	170	260	--	--	3.3	4.3	--
MAR								
22...	--	--	--	57	12	3.1	.53	--
APR								
05...	4200	--	--	23	2	3.5	.68	--
17...	1400	--	--	70	18	3.0	.74	--
MAY								
07...	940	--	--	67	9	2.9	.50	--
JUN								
06...	2300	--	--	40	9	3.0	2.3	--
JUL								
03...	350	165	180	46	15	3.6	1.3	--
AUG								
13...	3900	--	--	42	29	2.2	.41	--
SEP								
11...	--	--	--	12	8	4.7	1.7	--

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT							
11...	--	--	--	--	--	--	0
NOV							
20...	--	--	0	--	--	--	1
DEC							
06...	--	20	10	50	.0	--	1
06...	--	10	10	40	.0	--	1
FEB							
14...	500	0	0	--	--	.00	0
MAR							
22...	200	20	--	--	.0	.00	1
APR							
05...	200	20	--	--	.0	.00	1
17...	300	20	--	--	--	--	1
MAY							
07...	300	0	--	--	--	.00	--
JUN							
06...	400	0	--	--	.0	--	11
JUL							
03...	500	10	--	--	--	.00	1
AUG							
13...	300	10	--	--	--	.00	--
SEP							
11...	400	10	--	--	--	.00	--

05540500 DU PAGE RIVER AT SHOREWOOD, IL

LOCATION.--Lat 41°31'20", long 88°11'35", in SE¼SW¼ sec.10, T.35 N., R.9 E., Will County, Hydrologic Unit 07120004, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 52 at Shorewood, 3.8 mi (6.1 km) downstream from Lily Cache Creek and at mile 10.6 (17.1 km).

DRAINAGE AREA.--324 mi^2 (839 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year. Published as "at Troy" 1940-65.

REVISED RECORDS.--WSP 1035: 1944. WSP 1055: 1942(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and masonry dam. Datum of gage is 564.62 ft (172.096 m) National Geodetic Vertical Datum of 1929 (Illinois Department of Transportation bench mark). Prior to Apr. 11, 1941, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--39 years, 249 ft^3/s (7.052 m^3/s), 10.44 in/yr (265 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s (340 m^3/s) Oct. 11, 1954, gage height, 11.06 ft (3.371 m); minimum, 0.2 ft^3/s (0.006 m^3/s) Nov. 17, 1955, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s (37 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1630	5300	150	[a]*8.21	2.502	Apr. 12	0845	4330	123	6.38	1.945
Mar. 15	--	1800	51.0	--		Apr. 28	--	1990	53.8	--	
Mar. 19	1815	*6100	173	7.67	2.338	May 4	1600	2100	59.5	4.57	1.393
Mar. 31	0100	2680	75.9	5.11	1.558						

[a]Ice jam

Minimum discharge, 51 ft^3/s (1.44 m^3/s) Dec. 27, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	109	169	240	90	410	1800	1160	405	263	248	307
2	165	106	159	200	90	450	1550	885	298	192	176	260
3	176	106	174	180	98	800	1560	1670	231	169	164	225
4	177	105	277	165	95	2800	1240	2050	211	286	211	205
5	150	101	289	150	91	4500	1020	1540	219	258	171	189
6	146	108	245	140	89	3500	833	1100	226	194	276	174
7	162	143	210	125	88	2650	724	859	230	168	391	167
8	164	125	189	115	85	2290	668	660	322	153	258	160
9	146	121	126	105	88	2270	708	616	381	174	264	154
10	144	117	130	97	86	2010	653	580	373	161	303	151
11	127	105	160	93	88	1540	757	608	378	155	918	148
12	125	99	140	95	85	1220	3950	660	303	149	1100	141
13	120	113	135	105	81	1130	3440	580	254	142	640	137
14	115	246	150	115	80	1450	2000	524	230	144	359	137
15	114	209	168	107	82	1600	1300	497	214	154	258	132
16	117	158	150	98	84	1200	985	439	197	140	215	128
17	128	171	139	104	87	1180	807	408	180	129	192	122
18	122	294	160	100	90	1520	716	371	188	120	884	118
19	116	264	150	96	93	4540	630	348	255	116	1120	121
20	107	198	148	110	97	4820	580	331	223	113	963	123
21	102	177	144	106	102	3100	538	314	195	116	1120	116
22	105	164	165	100	107	1860	484	309	169	116	887	109
23	121	194	183	97	109	1550	451	298	160	112	707	112
24	148	277	194	100	150	1550	439	277	149	114	580	115
25	130	234	166	91	415	1450	477	262	143	149	421	112
26	165	194	148	101	440	1120	960	242	140	143	325	106
27	154	186	92	103	420	958	1260	237	137	121	290	105
28	131	193	202	102	395	912	1550	227	137	117	280	100
29	118	182	223	99	---	1140	1400	218	172	208	371	103
30	117	164	309	97	---	2370	1350	209	368	237	594	106
31	114	---	280	94	---	2440	---	208	---	400	423	---
TOTAL	4209	4963	5574	3630	3905	60330	34830	18687	7088	5213	15109	4383
MEAN	136	165	180	117	139	1946	1161	603	236	168	487	146
MAX	183	294	309	240	440	4820	3950	2050	405	400	1120	307
MIN	102	99	92	91	80	410	439	208	137	112	164	100
CFSM	.42	.51	.56	.36	.43	6.01	3.58	1.86	.73	.52	1.50	.45
IN.	.48	.57	.64	.42	.45	6.93	4.00	2.15	.81	.60	1.73	.50

CAL YR 1978 TOTAL 111541 MEAN 306 MAX 2620 MIN 77 CFSM .94 IN 12.81
WTR YR 1979 TOTAL 167921 MEAN 460 MAX 4820 MIN 80 CFSM 1.42 IN 19.28

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-76, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
OCT									
04...	1325	80010	--	--	164	--	--	16.0	16.5
18...	1300	17002	17002	--	122	1500	8.1	15.5	11.5
31...	0930	80010	--	--	120	--	--	16.0	10.0
NOV									
16...	0900	17002	17002	--	161	1160	--	4.5	5.0
16...	1000	17002	17002	--	161	1170	8.0	4.0	5.0
DEC									
18...	1230	80010	--	--	153	--	--	4.0	1.0
21...	1500	17002	17002	144	--	1550	8.4	-2.0	.0
FEB									
01...	1430	80010	--	--	90	--	--	-9.0	.0
20...	1400	17002	17002	97	--	1720	7.8	1.0	.0
MAR									
09...	1030	80010	--	--	2310	--	--	1.0	1.0
29...	1200	17002	17002	--	1020	780	7.6	12.0	4.5
APR									
05...	0900	17002	17002	--	1050	800	--	10.5	8.0
18...	1300	17002	17002	--	716	910	7.9	16.5	12.0
27...	0915	80010	--	--	1250	--	--	16.0	13.5
MAY									
08...	1600	17002	17002	--	638	880	8.1	29.5	18.5
30...	1645	80010	--	--	205	--	--	25.0	19.0
JUL									
17...	1600	17002	17002	--	129	1600	8.8	22.0	20.0
17...	1700	17002	17002	--	125	1600	8.6	22.0	20.0
AUG									
16...	1100	17002	17002	--	218	1050	7.8	21.5	20.0
21...	1100	80010	--	--	1160	--	--	25.0	21.5
SEP									
17...	1100	17002	17002	--	125	1400	8.6	19.5	17.0

DATE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
OCT										
18...	12.2	28	350	170	238	--	--	6.1	.06	--
NOV										
16...	11.4	20	--	135	167	--	--	3.7	1.1	1.4
16...	11.4	20	--	135	170	--	--	4.2	1.1	1.5
DEC										
21...	15.6	27	--	150	235	--	--	5.7	2.1	--
FEB										
20...	7.9	39	--	155	260	--	--	4.0	4.6	--
MAR										
29...	10.1	24	660	98	82	99	18	5.5	.49	--
APR										
05...	10.0	24	750	105	78	31	1	4.7	.40	--
18...	9.7	24	--	110	82	84	17	5.6	3.4	--
MAY										
08...	--	28	--	110	78	68	11	5.4	.08	--
JUL										
17...	--	32	--	185	225	24	9	3.5	.02	--
17...	--	40	--	185	225	23	9	3.7	.04	--
AUG										
16...	--	28	640	125	145	77	13	1.4	.10	--
SEP										
17...	12.5	28	260	185	230	8	--	4.3	.08	--

05540500 DU PAGE RIVER AT SHOREWOOD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT										
18...	--	--	--	--	10	--	--	--	--	1
NOV										
16...	--	--	--	--	0	60	.0	0	--	1
16...	--	--	--	--	0	60	.0	0	--	2
DEC										
21...	--	0	0	0	20	--	--	--	--	0
FEB										
20...	400	--	--	0	0	--	--	--	--	2
MAR										
29...	200	--	--	20	40	--	.0	--	--	0
APR										
05...	200	--	--	20	10	--	.0	--	--	1
18...	200	--	--	20	0	--	--	--	.00	1
MAY										
08...	200	--	--	20	80	--	--	--	.00	1
JUL										
17...	500	--	--	20	0	--	.0	--	.00	1
17...	500	--	--	10	0	--	.0	--	.00	1
AUG										
16...	400	--	--	20	0	--	--	--	.00	0
SEP										
17...	400	--	--	10	0	--	--	--	.00	2

05541710 AUX SABLE CREEK NEAR MORRIS, IL

LOCATION.--Lat 41°25'02", long 88°20'51", in NW¼NW¼ sec.20, T.34 N., R.8 E., Grundy County, Hydrologic Unit 07120005, at bridge on U.S. Highway 6, 0.4 mi (0.6 km) downstream from Collins Run, 6.0 mi (9.7 km) northeast of Morris, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--June to September 1979. Additional chemical data for water years 1968-69, 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DW 01.

WATER QUALITY DATA, JUNE TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
JUN										
13...	0900	17002	17002	--	7.7	21.0	20.0	6.7	16	1100
JUL										
17...	1000	17002	17002	600	8.2	24.0	19.5	--	12	--
17...	1100	17002	17002	600	8.1	24.0	19.5	--	8	--
AUG										
16...	1300	17002	17002	600	8.2	24.0	20.0	10.3	20	340
SEP										
17...	0900	17002	17002	600	8.4	20.5	17.0	9.1	20	260

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
JUN									
13...	--	--	71	32	48	12	10	.10	0
JUL									
17...	.0	220	88	27	14	4	3.5	.10	0
17...	.0	220	89	27	14	5	3.0	.06	--
AUG									
16...	.0	250	105	--	23	7	.10	--	--
SEP									
17...	.0	230	115	--	36	15	.00	--	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)
JUN									
13...	0	0	10	500	0	50	.0	0	.00
JUL									
17...	--	0	0	200	0	--	.0	--	.00
17...	0	0	40	--	0	20	.0	--	.00
AUG									
16...	--	--	0	500	0	70	.0	0	--
SEP									
17...	--	--	0	300	0	70	.0	0	--

05542000 MAZON RIVER NEAR COAL CITY, IL

LOCATION.--Lat 41°17'10", long 88°21'35", in SW¼SW¼ sec.31, T.33 N., R.8 E., Grundy County, Hydrologic Unit 07120005, on right bank at downstream side of bridge on State Highway 113, 0.2 mi (0.3 km) downstream from Johnny Run, 4 mi (6 km) west of Coal City, and at mile 15.0 (24.1 km).

DRAINAGE AREA.--455 mi^2 (1,178 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1035: 1943(P). WSP 1115: 1946. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.41 ft (160.754 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 30, 1940, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years, 320 ft^3/s (9.062 m^3/s), 9.55 in/yr (243 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft^3/s (498 m^3/s) July 15, 1958, gage height, 19.70 ft (6.005 m); no flow at times in many years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1924, reached a stage of about 21 ft (6.4 m), discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s (110 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1015	12200	346	15.36	4.682	Mar. 30	0945	6000	170	10.13	3.088
Mar. 14	1415	4790	136	8.88	2.707	Apr. 12	1630	*13300	377	*16.19	4.935
Mar. 19	2230	9200	261	12.98	3.956	Aug. 21	1200	10000	283	13.70	4.176

Minimum daily discharge, 9.8 ft^3/s (0.28 m^3/s) Sept. 24, 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	46	78	400	42	740	2020	968	95	81	122	88
2	43	46	83	280	43	900	2200	779	88	64	72	76
3	43	48	127	180	48	1200	1980	2210	81	51	66	68
4	46	55	400	130	44	5000	1500	1890	78	493	62	53
5	45	58	307	100	44	10000	1470	1260	83	902	53	43
6	40	70	194	80	43	6100	1090	928	76	396	64	39
7	34	74	136	66	46	5430	827	687	85	225	120	35
8	29	66	120	60	46	5460	779	531	209	154	76	30
9	26	62	110	56	46	4650	815	421	168	127	51	27
10	23	58	105	54	47	3150	676	356	160	109	38	24
11	25	56	100	53	48	2060	1230	369	134	83	31	24
12	25	56	105	59	49	1480	10600	378	115	70	27	22
13	26	53	100	65	50	1580	6320	319	120	55	22	21
14	23	55	95	71	50	4090	2390	292	120	55	21	19
15	21	60	90	66	50	2940	1660	266	103	687	19	18
16	19	51	85	58	52	2200	1210	225	90	273	15	17
17	19	51	80	54	58	2830	928	206	81	146	12	17
18	18	74	76	49	52	3660	698	194	100	92	35	14
19	18	76	78	47	52	7300	556	185	571	68	127	13
20	20	51	80	45	58	6740	461	170	373	36	1900	12
21	21	40	92	45	70	3360	396	152	242	40	8440	12
22	23	38	80	44	115	2430	339	141	168	35	2840	12
23	23	46	71	44	175	2090	303	141	134	30	1970	12
24	27	97	66	43	250	2110	296	131	103	27	1470	9.8
25	28	97	69	42	350	1970	386	120	81	106	797	10
26	35	74	65	41	450	1330	1420	117	66	586	507	10
27	78	74	58	41	600	1140	1720	117	53	182	356	9.8
28	66	76	58	40	680	1310	1690	106	50	103	259	9.8
29	55	64	62	40	---	3120	1280	95	51	68	200	9.8
30	46	100	173	40	---	5340	1240	95	85	51	154	16
31	45	---	550	41	---	3020	---	97	---	90	115	---
TOTAL	1043	1872	3893	2434	3658	104730	48480	13946	3963	5485	20041	771.2
MEAN	33.6	62.4	126	78.5	131	3378	1616	450	132	177	646	25.7
MAX	78	100	550	400	680	10000	10600	2210	571	902	8440	88
MIN	18	38	58	40	42	740	296	95	50	27	12	9.8
CFSM	.07	.14	.28	.17	.29	7.42	3.55	.99	.29	.39	1.42	.06
IN.	.09	.15	.32	.20	.30	8.56	3.96	1.14	.32	.45	1.64	.06

CAL YR 1978 TOTAL 123538.3 MEAN 338 MAX 4520 MIN 5.6 CFSM .74 IN 10.10
WTR YR 1979 TOTAL 210316.2 MEAN 576 MAX 10600 MIN 9.8 CFSM 1.27 IN 17.20

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
24...	1000	17002	17002	28	700	8.0	6.5	9.0	9.2	20	150
24...	1100	17002	17002	28	750	8.2	8.5	9.5	9.8	16	170
27...	1435	80010	--	85	--	--	21.0	11.0	--	--	--
NOV											
14...	1100	17002	17002	50	720	8.5	4.5	8.0	11.5	12	--
DEC											
18...	1430	80010	--	80	--	--	2.5	.5	--	--	--
21...	1100	17002	17002	92	700	8.2	-2.0	.0	14.0	8	--
21...	1300	17002	17002	64	720	8.3	-1.0	.0	14.0	4	--
JAN											
31...	1350	80010	--	17	--	--	--	.0	--	--	--
FEB											
20...	1000	17002	17002	58	1020	7.7	-3.5	.0	8.8	12	--
MAR											
14...	1145	80010	--	4350	--	--	2.0	1.0	--	--	--
29...	0800	17002	17002	2320	550	7.4	9.5	6.0	11.2	36	1300
APR											
09...	1500	17002	17002	821	560	7.7	5.0	4.5	12.8	8	--
09...	1600	17002	17002	840	550	7.7	5.0	4.5	12.8	12	--
18...	0900	17002	17002	721	620	7.7	13.0	10.0	10.0	16	--
MAY											
08...	0900	17002	17002	546	680	6.4	24.5	16.5	--	12	--
JUN											
12...	1615	80010	--	115	--	--	26.5	23.5	--	--	--
13...	1100	17002	17002	120	--	--	24.5	21.0	7.2	8	2600
JUL											
17...	0700	17002	17002	162	500	8.2	18.5	20.0	--	24	--
31...	1005	80010	80010	70	675	8.5	28.5	26.0	--	--	--
AUG											
16...	1315	80010	--	16	--	--	27.5	23.5	--	--	--
22...	0900	17002	17002	2720	450	7.8	23.5	22.0	--	28	--
28...	1115	80010	80010	263	620	8.1	25.0	21.0	--	--	--
SEP											
10...	1345	80010	--	24	--	--	30.0	24.0	--	--	--
18...	1100	17002	17002	17	650	8.4	21.0	17.0	9.7	16	260

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2) (00405)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT									
24...	--	--	--	--	110	40	--	--	4.6
24...	--	--	--	--	115	40	--	--	4.9
NOV									
14...	--	--	--	--	115	40	--	--	3.2
DEC									
21...	--	--	--	--	110	35	--	--	7.7
21...	--	--	--	--	110	35	--	--	7.2
FEB									
20...	--	--	270	--	145	53	3	--	5.4
MAR									
29...	--	.0	150	--	64	--	330	52	9.9
APR									
09...	--	.0	190	--	79	--	59	11	12
09...	--	.0	190	--	80	--	65	15	11
18...	--	.0	190	--	72	--	110	16	11
MAY									
08...	--	.0	192	--	86	--	50	4	9.2
JUN									
13...	--	.0	40	--	100	--	41	9	9.2
JUL									
17...	--	.0	190	--	56	--	160	18	8.9
31...	.0	.0	200	1.2	90	--	--	--	--
AUG									
22...	--	.0	150	--	72	--	130	20	4.5
28...	.0	.0	220	3.4	62	--	--	--	--
SEP									
18...	--	.0	200	--	130	--	10	2	2.0

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)
OCT									
24...	.04	--	--	200	0	--	0	--	--
24...	.02	--	--	200	0	--	0	--	--
NOV									
14...	.01	--	--	--	--	--	--	--	--
DEC									
21...	.23	.08	--	100	--	--	--	--	--
21...	.23	--	--	100	--	--	--	--	--
FEB									
20...	.77	--	--	--	--	--	--	--	--
MAR									
29...	.07	--	--	--	--	--	--	--	--
APR									
09...	.02	--	--	--	--	--	--	--	--
09...	.02	--	--	--	--	--	--	--	--
18...	.03	--	--	--	--	--	--	--	--
MAY									
08...	.03	--	--	--	--	--	--	--	--
JUN									
13...	.07	--	--	--	--	--	--	--	--
JUL									
17...	.04	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
AUG									
22...	.07	--	--	--	--	--	--	--	--
28...	--	--	0	--	--	<10	--	10	20
SEP									
18...	.04	--	--	--	--	--	--	--	--

05542000 MAZON RIVER NEAR COAL CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT											
24...	0	--	--	--	--	--	0	--	60	--	--
24...	0	--	--	--	--	--	0	--	20	--	--
NOV											
14...	0	--	--	--	--	--	0	--	20	--	--
DEC											
21...	0	--	--	--	--	--	10	--	10	--	--
21...	0	--	--	--	--	--	0	--	10	--	--
FEB											
20...	--	--	200	--	--	--	10	--	30	--	--
MAR											
29...	--	--	11000	--	--	--	50	--	170	--	--
APR											
09...	--	--	2200	--	--	--	0	--	30	--	--
09...	--	--	2000	--	--	--	0	--	30	--	--
18...	--	--	3000	--	--	--	0	--	60	--	--
MAY											
08...	--	--	1700	--	--	--	0	--	30	--	--
JUN											
13...	--	--	1000	--	--	--	0	--	0	--	--
JUL											
17...	10	--	1900	--	--	--	0	--	70	--	--
31...	--	--	1400	1400	20	--	--	--	30	30	0
AUG											
22...	--	--	2700	--	--	--	0	--	80	--	--
28...	--	10	1500	1500	20	10000	--	30	50	40	10
SEP											
18...	--	--	200	--	--	--	0	--	20	--	--

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
24...	--	--	--	--	100	--	.00	4	--	--	--
24...	--	--	--	--	0	--	.00	0	--	--	--
NOV											
14...	--	--	--	--	0	--	--	0	--	--	--
DEC											
21...	--	--	--	--	0	--	.00	0	--	--	--
21...	--	--	--	--	0	--	--	--	--	--	--
FEB											
20...	--	.0	--	--	0	--	--	--	--	--	--
MAR											
29...	--	.0	--	--	100	--	--	0	--	--	--
APR											
09...	--	.0	--	--	0	--	--	1	--	--	--
09...	--	.0	--	--	0	--	--	1	--	--	--
18...	--	.0	--	--	0	--	--	0	--	--	--
MAY											
08...	--	.0	--	--	0	--	--	--	--	--	--
JUN											
13...	--	.0	--	--	0	--	--	--	--	--	--
JUL											
17...	--	.0	--	--	0	--	.00	--	--	--	--
31...	--	--	--	--	--	--	--	--	77	15	90
AUG											
22...	--	.0	--	--	0	--	--	--	--	--	--
28...	430	--	.00	1	--	40	--	--	74	53	86
SEP											
18...	--	.1	--	--	0	--	--	--	--	--	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL
(National stream-quality accounting network station)

LOCATION.--Lat 41°19'40", long 88°45'10", in SE¼SW¼ sec.13, T.33 N., R.4 E., La Salle County, Hydrologic Unit 07120005, on right bank 0.4 mi (0.6 km) downstream from dam in Marseilles, 6.9 mi (11.1 km) upstream from Fox River, and at mile 246.5 (396.6 km).

DRAINAGE AREA.--8,259 mi^2 (21,391 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1919 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 462.91 ft (141.095 m) National Geodetic Vertical Datum of 1929. October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi (26.7 km) upstream, at datum 478.50 ft (145.847 m) NGVD. January 1935 to September 1939, water-stage recorder at site 300 ft (91 m) downstream from site used 1919-35 and at that datum.

REMARKS.--Water-discharge records good except those for the winter periods, which are poor. Figures of daily discharge include flow through navigation locks. Flow regulated by powerplants and navigation dam above station. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal (station 05537000).

AVERAGE DISCHARGE.--60 years, 10,700 ft^3/s (303.0 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,900 ft^3/s (2,660 m^3/s) July 14, 1957, gage height, 15.20 ft (4.633 m); minimum daily, 1,460 ft^3/s (41.3 m^3/s) Oct. 16, 1943.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 26.2 ft (7.99 m) at Morris occurred in 1831, and a stage of 25.4 ft (7.74 m), ice jam, occurred at present site on Jan. 21, 1916.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71,100 ft^3/s (2,010 m^3/s) Mar. 20, gage height, 13.08 ft (3.987 m); minimum daily, 2,600 ft^3/s (73.6 m^3/s) Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4960	3780	4340	6200	3700	9350	41800	29600	6240	7150	9270	9480
2	5140	3090	4310	5500	3600	11400	37700	26500	5540	6350	7830	9380
3	5500	2790	5710	4900	3300	13100	35600	34600	5440	6760	8220	7260
4	3680	3340	4980	4300	3400	34500	31800	36700	5070	7600	8240	7950
5	4560	3490	6390	4700	3300	59800	27300	33700	6550	10900	9190	5870
6	4450	4010	5490	4450	3400	65800	24600	28100	6040	11900	11800	7000
7	3470	3650	4810	4200	3400	62800	21700	23800	8720	12000	10400	6270
8	3770	2600	4300	4500	3300	64700	20300	20800	8750	8880	9500	5480
9	4550	3900	4530	3800	3200	69400	19500	17700	8360	7470	11100	4720
10	3560	3200	3640	3850	3300	61200	18700	16300	11400	7580	13900	4780
11	3930	3100	4420	3750	3400	49200	21000	17900	9650	8190	11200	4830
12	4570	3280	4520	3700	3320	39000	48800	14400	10100	9290	11200	4900
13	4060	3510	4730	3750	3400	34200	62700	14100	9280	8790	8780	4140
14	4440	4110	4880	4050	3330	38200	47100	13000	9230	9390	6990	3680
15	4430	3700	4820	4300	3230	37800	38800	12500	8870	7440	7960	4580
16	4260	4150	3830	4000	3300	32100	33200	12200	8320	7190	6680	5490
17	3590	3760	4520	4200	3050	30600	28400	11700	6720	7800	7480	5390
18	3010	4340	4510	4250	2700	33800	24400	11300	9070	7280	14500	5610
19	3450	3910	4670	4400	3200	51100	20200	11200	6280	7790	13300	6290
20	3430	4050	3740	3900	3600	68500	18400	9310	7480	5950	17800	6120
21	3880	3750	4570	4200	4590	58800	15900	9220	6450	5860	26500	6710
22	3640	3230	4360	3850	5200	46500	14900	8850	7200	5890	26400	4750
23	4450	5310	4580	3550	6330	37600	13600	8450	7860	4620	23700	5340
24	4420	4660	4110	3550	7410	34600	13800	7710	5550	6290	20100	4960
25	3710	3450	4210	3750	7010	33100	15200	7060	5080	5150	16600	4650
26	4670	4710	4270	3500	7260	28000	25600	7170	5520	5340	15500	5280
27	4230	4130	3510	3600	7940	25400	32000	6730	5490	7570	13100	5260
28	4490	4650	3400	3590	9980	23600	35300	6530	5100	8640	11400	5450
29	3840	3680	4870	3800	---	30200	33400	6050	11000	6750	12300	5010
30	4220	4050	6900	3900	---	47300	33100	5850	8530	12500	9280	4880
31	6190	---	5700	3300	---	48400	---	5930	---	11900	9400	---
TOTAL	130550	113380	143620	127290	122150	1280050	854800	474960	224890	246210	389620	171510
MEAN	4211	3779	4633	4106	4363	41290	28490	15320	7496	7942	12570	5717
MAX	6190	5310	6900	6200	9980	69400	62700	36700	11400	12500	26500	9480
MIN	3010	2600	3400	3300	2700	9350	13600	5850	5070	4620	6680	3680

CAL YR 1978 TOTAL 3408390 MEAN 9338 MAX 48700 MIN 2600
WTR YR 1979 TOTAL 4279030 MEAN 11720 MAX 69400 MIN 2600

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

REMARKS.--Prior to water year 1977 sample collected at bridge on county highway, 0.3 mi (0.5 km) upstream from discharge station. During high-water periods sample collected at bridge on State Highway 170, 6.0 mi (9.7 km) upstream from discharge station. Water temperature is recorded and a sample for specific conductance is collected daily by a local observer. Interruptions in daily record due to missed samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,330 micromhos Dec. 11, 1978; minimum daily, 310 micromhos June 27, 1978.
WATER TEMPERATURES: Maximum daily, 31.5°C July 19, 22, 1977; minimum daily, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,330 micromhos Dec. 11; minimum daily, 415 micromhos Mar. 8.
WATER TEMPERATURES: Maximum daily, 29.5°C July 28, 31, Aug. 9, 10; minimum daily, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
17...	1220	80010	3480	770	7.8	15.0	14.5	10	7.6
NOV									
15...	1210	80010	3110	820	7.8	6.0	11.5	14	8.4
DEC									
12...	1140	80010	5150	1270	7.8	3.0	2.5	10	11.7
JAN									
18...	1345	80010	3590	1080	7.8	-9.0	.5	7.0	12.9
FEB									
13...	1315	80010	2900	1100	7.6	-2.0	2.0	3.0	12.2
MAR									
07...	1230	80010	62000	470	8.0	4.0	2.0	75	11.8
19...	1630	80010	56000	530	7.6	16.5	8.0	80	11.1
APR									
27...	1215	80010	31800	700	7.6	9.5	14.5	100	8.4
MAY									
23...	1215	80010	8170	780	7.9	24.0	22.5	20	6.4
JUL									
17...	1230	80010	8520	645	7.4	23.0	25.5	30	5.1
AUG									
15...	1120	80010	7480	600	7.5	22.5	24.5	25	7.3
SEP									
25...	1130	80010	4320	685	7.8	25.0	22.0	20	6.7

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)
OCT									
17...	19	110	120	250	95	64	23	56	32
NOV									
15...	--	69	61	260	100	63	25	62	33
DEC									
12...	25	110	K16	300	98	75	27	6.4	4
JAN									
18...	55	28	2100	380	170	92	37	85	32
FEB									
13...	73	26	56	310	130	81	26	88	38
MAR									
07...	51	5700	K12000	130	56	32	13	27	30
19...	51	1400	7000	210	100	51	20	26	21
APR									
27...	37	K2200	5400	270	100	67	25	29	19
MAY									
23...	21	K100	K50	310	120	78	29	40	21
JUL									
17...	35	190	160	220	85	57	20	39	27
AUG									
15...	15	1300	K30	210	73	54	19	35	26
SEP									
25...	29	84	K19	220	80	55	20	45	30

DATE	SODIUM ADSORPTION RATIO (00931)	SODIUM+POTASSIUM DIS-SOLVED (MG/L AS NA) (00933)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKALINITY AS CACO3) (00410)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT									
17...	1.5	--	5.6	160	--	100	78	.7	5.3
NOV									
15...	1.7	--	6.4	160	--	110	79	.7	4.0
DEC									
12...	.2	--	5.5	200	--	120	190	.5	6.5
JAN									
18...	1.9	--	5.9	210	--	130	130	.6	8.6
FEB									
13...	2.2	--	6.0	180	--	130	140	.6	8.0
MAR									
07...	1.0	--	3.3	77	--	45	50	.2	4.3
19...	.8	--	3.0	110	--	65	46	.3	7.1
APR									
27...	.8	--	3.5	170	--	91	50	.4	6.7
MAY									
23...	1.0	--	4.1	190	--	110	62	.4	5.3
JUL									
17...	1.1	44	4.6	140	11	77	53	.4	4.6
AUG									
15...	1.0	39	3.9	140	8.6	70	48	.4	6.8
SEP									
25...	1.3	50	4.8	140	--	74	56	.5	3.8

K Results based on colony count outside the acceptable range (non-ideal colony count).

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L) (00540)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)
OCT											
17...	458	429	.62	4300	43	--	9	5.1	--	1.2	--
NOV											
15...	481	446	.65	4040	39	--	5	2.8	--	1.9	--
DEC											
12...	702	551	.95	9760	23	--	8	2.6	--	3.4	--
JAN											
18...	624	615	.85	6050	64	--	2	3.7	--	3.0	--
FEB											
13...	636	588	.87	4980	15	--	4	2.4	--	3.9	--
MAR											
07...	248	221	.34	41500	14	--	0	2.9	--	.65	--
19...	322	285	.44	48700	221	--	33	4.9	--	.83	--
APR											
27...	421	375	.57	36100	143	127	16	5.7	--	.49	.59
MAY											
23...	487	443	.66	10700	4	4	0	4.2	--	.82	.99
JUL											
17...	408	340	.55	9390	65	54	11	3.9	--	1.3	1.6
AUG											
15...	357	321	.49	7210	57	40	17	2.4	--	.34	.41
SEP											
25...	406	353	.55	4740	71	47	24	3.2	2.1	.91	1.1

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
OCT											
17...	.80	2.0	.00	2.0	7.1	--	31	.55	--	--	.41
NOV											
15...	1.8	3.7	.10	3.6	6.5	--	29	.75	--	--	.58
DEC											
12...	1.4	4.8	.30	4.5	7.4	--	33	.65	--	--	.52
JAN											
18...	1.4	4.4	.30	4.1	8.1	--	36	.82	--	--	.68
FEB											
13...	1.1	5.0	.20	4.8	7.4	--	33	.76	--	--	.68
MAR											
07...	1.6	2.2	1.0	1.2	5.1	--	23	.23	--	--	.10
19...	2.2	3.0	1.5	1.5	7.9	--	35	.81	--	--	.15
APR											
27...	.71	1.2	.10	1.1	6.9	--	31	.37	1.1	1.1	.19
MAY											
23...	1.1	1.9	.40	1.5	6.1	--	27	.35	1.1	1.1	.21
JUL											
17...	1.3	2.6	.60	2.0	6.5	--	29	.49	--	1.5	.27
AUG											
15...	1.1	1.4	.40	1.0	3.8	--	17	.52	--	1.6	.29
SEP											
25...	.69	1.6	.00	2.2	4.8	4.3	21	.69	--	2.1	.44

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA) (01006)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD) (01026)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT									
17...	2	--	--	--	--	1	--	--	<10
NOV									
15...	3	2	0	0	0	--	--	1	10
DEC									
12...	2	--	--	--	--	0	--	--	10
JAN									
18...	3	--	--	--	--	0	--	--	20
FEB									
13...	2	1	0	0	0	1	0	1	20
MAR									
07...	3	--	--	--	--	--	--	--	20
19...	2	--	--	--	--	1	--	--	30
APR									
27...	4	--	--	--	--	10	--	--	80
MAY									
23...	3	2	0	0	50	2	2	0	30
AUG									
15...	3	4	0	0	40	3	2	1	30
SEP									
25...	3	--	--	--	--	0	--	--	20

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR) (01031)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO) (01036)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU) (01041)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT								
17...	--	--	--	--	--	24	--	--
NOV								
15...	8	2	1	1	0	17	12	5
DEC								
12...	--	--	--	--	--	4	--	--
JAN								
18...	--	--	--	--	--	14	--	--
FEB								
13...	18	2	1	0	1	12	6	6
MAR								
07...	--	--	--	--	--	28	--	--
19...	--	--	--	--	--	68	--	--
APR								
27...	--	--	--	--	--	40	--	--
MAY								
23...	0	40	2	1	1	12	8	4
AUG								
15...	10	20	0	0	1	19	15	4
SEP								
25...	--	--	--	--	--	20	--	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB) (01050)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT									
17...	1000	--	--	23	--	--	--	--	--
NOV									
15...	1100	1100	30	--	--	0	80	60	20
DEC									
12...	790	--	--	0	--	--	--	--	--
JAN									
18...	630	--	--	10	--	--	--	--	--
FEB									
13...	310	290	20	12	7	5	80	10	70
MAR									
07...	9100	--	--	--	--	--	--	--	--
19...	10000	--	--	41	--	--	--	--	--
APR									
27...	6000	--	--	100	--	--	--	--	--
MAY									
23...	1100	1100	10	130	130	2	60	60	4
AUG									
15...	1600	1600	10	22	20	2	80	60	20
SEP									
25...	1900	--	--	0	--	--	--	--	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG) (71895)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE) (01146)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG) (01076)	SILVER, DISSOLVED (UG/L AS AG) (01075)
OCT									
17...	<.5	--	--	--	--	--	--	--	--
NOV									
15...	<.5	.0	<.5	0	0	0	0	0	0
DEC									
12...	<.5	--	--	--	--	--	--	--	--
JAN									
18...	<.5	--	--	--	--	--	--	--	--
FEB									
13...	<.5	.0	<.5	1	0	1	0	0	0
MAR									
07...	<.5	--	--	--	--	--	--	--	--
19...	<.5	--	--	--	--	--	--	--	--
APR									
27...	.8	--	--	--	--	--	--	--	--
MAY									
23...	<.5	.0	<.5	1	0	1	0	0	0
AUG									
15...	<.5	.0	<.5	1	1	0	0	0	0
SEP									
25...	<.5	--	--	--	--	--	--	--	--

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN) (01091)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
17...	--	--	--	6.7	--	--	0	163	1530	100	100
NOV											
15...	50	20	30	--	10	1.5	0	195	1640	100	100
DEC											
12...	--	--	--	7.3	--	--	0	219	3050	99	99
JAN											
18...	--	--	--	8.8	--	--	0	779	7550	--	96
FEB											
13...	100	20	80	--	7.3	.2	0	1080	8460	--	96
MAR											
07...	--	--	--	9.4	--	--	0	3870	648000	--	66
19...	--	--	--	16	--	--	0	3730	564000	--	81
APR											
27...	--	--	--	11	--	--	2	236	20300	--	74
MAY											
23...	90	70	20	--	7.8	1.2	1	47	1040	--	95
JUL											
17...	--	--	--	7.8	--	--	0	63	1450	--	3
AUG											
15...	80	60	20	--	5.1	1.2	0	56	1130	--	87
SEP											
25...	--	--	--	10	--	--	0	84	980	--	71

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	845	890	1090	1030	1230	605	620	855	745	590	700
2	700	820	860	1030	1040	1120	615	630	865	770	635	700
3	710	810	845	950	1080	1100	630	680	855	770	595	675
4	740	805	850	980	1090	1080	645	625	895	730	565	710
5	730	795	970	1040	1090	550	680	605	865	665	645	740
6	720	795	995	1100	1110	485	680	625	915	650	635	750
7	725	785	965	1080	1150	445	685	640	930	585	620	725
8	720	800	1020	---	1120	415	710	650	890	595	620	695
9	700	775	1120	---	1130	430	755	680	870	575	620	675
10	725	760	1230	---	1120	455	750	690	840	610	600	685
11	760	750	1330	---	1110	500	750	690	810	665	620	720
12	755	790	1270	---	1120	530	670	735	700	665	600	730
13	740	785	1140	---	1100	550	475	770	720	705	595	720
14	775	820	1150	---	1060	595	500	755	735	660	540	740
15	790	820	1240	---	1040	560	515	770	725	660	570	770
16	770	810	1160	---	1040	600	520	745	720	710	660	780
17	770	845	1160	1040	1070	615	570	780	720	645	690	765
18	780	855	1110	1080	1060	615	610	750	730	655	710	780
19	770	905	1120	1010	1040	570	650	770	745	645	700	770
20	790	940	1020	1020	995	470	700	785	725	655	610	800
21	770	885	1050	1000	1000	535	710	745	740	620	540	750
22	785	850	1120	1020	1010	585	730	780	720	625	460	710
23	785	860	1190	1020	1030	620	755	775	750	635	530	710
24	760	900	1080	---	1060	630	765	795	750	660	560	680
25	750	915	1060	---	990	660	800	820	730	670	595	660
26	775	890	1070	995	1130	685	800	795	740	675	600	645
27	795	840	1090	995	1200	700	710	800	790	670	620	630
28	800	880	1100	980	1250	695	665	835	775	690	630	645
29	835	915	1120	990	---	670	600	840	770	700	650	630
30	845	905	1150	1040	---	665	615	860	770	690	685	640
31	810	---	1140	1030	---	600	---	855	---	695	665	---
MEAN	760	838	1080	---	1080	644	662	739	788	667	611	711
MAX	845	940	1330	---	1250	1230	800	860	930	770	710	800
MIN	680	750	845	---	990	415	475	605	700	575	460	630

WTR YR 1979 MEAN --- MAX 1330 MIN 415

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	15.0	5.0	4.0	.0	5.0	8.0	11.5	25.0	25.5	27.0	26.0
2	21.0	16.5	4.5	.0	.0	4.5	8.0	12.5	25.0	26.5	27.0	27.5
3	19.5	17.5	4.0	.0	.0	6.0	8.0	14.0	25.5	25.0	26.5	27.0
4	20.5	16.5	4.0	.0	.0	5.0	8.0	13.5	25.0	25.0	27.5	26.0
5	18.5	16.5	4.5	.0	.0	1.5	8.5	14.0	26.0	23.5	28.0	27.5
6	17.5	14.5	4.0	.0	.0	1.5	7.0	15.0	26.5	23.5	29.0	27.5
7	17.5	15.0	4.0	.0	.0	1.5	6.5	16.0	25.5	23.0	29.0	26.0
8	17.0	15.5	.5	---	.0	2.5	7.0	18.0	26.0	24.0	28.5	25.5
9	17.0	16.0	.5	---	.0	2.0	7.0	22.0	26.0	24.5	29.5	25.5
10	16.0	15.0	.0	---	---	1.0	7.0	23.5	25.0	25.0	29.5	25.5
11	16.5	14.0	.0	---	.0	.0	7.0	22.0	24.5	25.5	27.5	26.0
12	17.5	12.5	2.5	---	.0	1.5	10.0	21.0	23.5	27.0	26.5	25.5
13	18.0	13.5	2.5	---	1.0	3.0	11.5	20.0	23.5	28.0	25.0	24.5
14	17.0	12.0	4.0	---	2.0	2.5	11.0	20.0	24.5	27.5	25.0	23.5
15	15.5	11.5	5.0	---	3.0	2.0	11.0	20.0	25.0	28.0	23.5	23.5
16	15.5	10.5	5.0	---	3.0	3.0	11.5	20.5	25.0	28.0	24.0	24.0
17	15.5	10.0	4.5	.5	2.0	4.5	12.5	21.5	25.5	28.0	23.0	23.5
18	15.5	11.0	4.0	.0	1.5	5.5	13.0	22.0	24.5	27.5	24.0	23.0
19	15.5	10.0	4.0	.5	.0	8.0	13.5	22.0	24.5	27.0	25.0	22.5
20	16.0	9.0	4.0	1.0	.5	8.0	14.0	23.5	24.5	26.5	24.5	23.0
21	17.0	7.5	3.0	1.5	3.0	7.5	14.5	22.0	26.5	28.0	24.0	22.5
22	17.0	7.5	4.0	2.0	3.5	8.0	15.5	21.0	26.5	28.5	24.0	22.5
23	16.5	8.0	4.0	2.5	6.0	9.5	15.0	22.5	25.5	28.5	24.0	22.0
24	15.5	8.0	3.5	---	6.5	9.0	16.5	21.5	25.5	29.0	24.0	20.5
25	15.0	8.0	4.0	---	5.5	6.5	18.0	20.5	25.0	28.5	25.0	23.0
26	16.5	8.0	3.0	2.0	5.5	5.5	17.5	20.0	24.0	27.5	24.0	20.5
27	15.5	7.0	3.5	2.0	5.0	6.0	14.5	20.5	25.0	28.0	25.0	23.0
28	16.0	4.5	3.0	2.0	3.0	6.0	13.5	20.5	25.5	29.5	24.5	24.0
29	15.5	4.5	3.0	.5	---	7.0	12.5	22.5	25.5	28.5	24.5	23.5
30	15.5	5.0	3.0	.5	---	10.0	11.5	23.5	26.5	29.0	26.0	24.0
31	15.5	---	4.0	.5	---	9.5	---	24.5	---	29.5	26.0	---
MEAN	17.0	11.5	3.5	---	2.0	5.0	11.5	19.5	25.0	27.0	26.0	24.5
MAX	21.0	17.5	5.0	---	6.5	10.0	18.0	24.5	26.5	29.5	29.5	27.5
MIN	15.0	4.5	.0	---	.0	.0	6.5	11.5	23.5	23.0	23.0	20.5

WTR YR 1979 MEAN --- MAX 29.5 MIN .0

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 15,78	MAR 7,79	MAR 19,79	APR 27,79
TIME	1210	1230	1630	1215
TOTAL CELLS/ML	21000	1400	1400	2400
DIVERSITY: DIVISION	1.2	1.2	1.0	1.4
.CLASS	1.3	1.2	1.0	1.4
..ORDER	1.6	1.5	1.7	2.1
...FAMILY	1.8	3.0	2.8	2.6
....GENUS	2.1	3.1	3.3	0.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	200	15	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	130	6
...OOCYSTACEAE								
....ANKISTRODESMUS	800	4	--	-	--	-	120	5
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	34	1
....NEPHROCYTIUM	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	67	3
....WESTELLA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	530	3	--	-	--	-	84	4
....TETRASTRUM	530	3	--	-	--	-	67	3
..VOLVOCALES								
...CHLAMYDOMONADACEAE	--	-	--	-	--	-	50	2
....CHLAMYDOMONAS	530	3	--	-	--	-	--	-
...PHACOTACEAE								
....PTEROMONAS	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	13000#	62	120	8	100	7	720#	30
....MELOSIRA	1100	5	--	-	330#	24	320	13
....STEPHANODISCUS	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	58	4	--	-	--	-
....COCCONEIS	--	-	--	-	50	4	--	-
....RHOICOSPHENIA	--	-	--	-	25	2	--	-
...DIATOMACEAE								
....DIATOMA	--	-	58	4	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	58	4	--	-	--	-
....FRAGILARIA	--	-	--	-	200	15	--	-
....SYNEDRA	--	-	--	-	50	4	50	2
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	58	4	25	2	--	-
...NAVICULACEAE								
....NAVICULA	130	1	58	4	130	9	67	3
....NEIDIUM	--	-	120	8	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	270	1	400#	29	100	7	300	13
...SURIRELLACEAE								
....SURIRELLA	--	-	58	4	76	6	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...MALLOMONADACEAE								
....MALLOMONAS	130	1	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 15,78		MAR 7,79		MAR 19,79		APR 27,79	
TIME	1210		1230		1630		1215	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	130	1	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	2300	11	--	-	--	-	34	1
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	1500	7	2300#	17	--	-	270	11
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	25	2	17	1
....TRACHELOMONAS	--	-	170	13	25	2	34	1
PYRROPHYTA (FIRE ALGAE)								
.DINOPHYCEAE								
..PERIDINIALES								
...GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	25	2	--	-

DATE	MAY 23,79	JUL 17,79	AUG 15,79
TIME	1215	1230	1120
TOTAL CELLS/ML	5600	20000	14000
DIVERSITY: DIVISION	1.1	1.6	1.5
.CLASS	1.1	1.6	1.5
..ORDER	1.7	2.1	1.7
...FAMILY	2.2	2.5	1.8
....GENUS	3.1	3.1	2.2

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...HYDRODICTYACEAE						
....PEDIASTRUM	--	-	--	-	--	-
...MICRACTINIACEAE						
....GOLENKINIA	--	-	*	0	--	-
....MICRACTINIUM	320	6	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	360	6	410	2	100	1
....DICTYOSPHAERIUM	--	-	3900#	20	210	1
....KIRCHNERIELLA	--	-	730	4	--	-
....NEPHROCYTIUM	--	-	330	2	--	-
....SELENASTRUM	--	-	--	-	160	1
....TREUBARIA	--	-	--	-	--	-
....WESTELLA	140	3	--	-	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	280	5	980	5	--	-
....CRUCIGENIA	--	-	330	2	--	-
....SCENEDESMUS	640	11	2300	11	1100	8
....TETRASTRUM	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE	--	-	--	-	--	-
....CHLAMYDOMONAS	430	8	1100	6	100	1
...PHACOTACEAE						
....PTEROMONAS	--	-	--	-	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE TIME	MAY 23,79 1215		JUL 17,79 1230		AUG 15,79 1120	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	1300#	23	4500#	22	3100#	22
....MELOSIRA	1400#	25	--	-	1600	11
....STEPHANODISCUS	280	5	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-
....SYNEDRA	36	1	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
....NEIDIUM	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	280	5	330	2	360	3
...SURIRELLACEAE						
....SURIRELLA	--	-	--	-	--	-
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...MALLOMONADACEAE						
....MALLOMONAS	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	36	1	--	-	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	36	1	--	-	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	71	1	3800#	19	*	0
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	890	4	7200#	51
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	--	-	100	1
....TRACHELOMONAS	--	-	240	1	--	-
PYRRHOPHYTA (FIRE ALGAE)						
.DINOPHYCEAE						
..PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

05543500 ILLINOIS RIVER AT MARSEILLES, IL--Continued

PERIPHYTON

(Sampling method - Polyethylene strip)

DATE	LENGTH OF EXPOSURE (DAYS) (00022)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2) (70958)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS) (70950)
NOV						
14...	28	43.8	52.4	55.1	5.03	--
MAR						
07...	22	1.57	1.89	2.10	.000	--
MAY						
23...	27	24.8	28.1	49.2	.000	67.1
AUG						
15...	29	5.98	7.17	56.6	21.7	21.0

05546500 FOX RIVER AT WILMOT, WI

LOCATION.--Lat 42°30'40", long 88°10'45", in SW¼ sec.30, T.1 N., R.20 E., Kenosha County, Hydrologic Unit 07120006, on right bank 100 ft (30 m) downstream from bridge on County Trunk Highway C, 300 ft (90 m) upstream from Wilmot Dam, 1.0 mi (1.6 km) north of Wisconsin-Illinois State line, and 6.0 mi (9.6 km) upstream from Fox Chain of Lakes.

DRAINAGE AREA.--868 mi^2 (2,248 km^2).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1308: 1943(M), 1945(M). WRD Wis. 1967: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 735.22 ft (224.095 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1956, nonrecording gage and concrete dam.

REMARKS.--Records good except those for winter periods, which are fair. Three 6-ft (1.8 m) lift gates in Wilmot Dam were in operation during the year; discharge through gates computed by weir and orifice formulas and added to flow over dam. Gage-height telemeter at station.

AVERAGE DISCHARGE.--40 years, 512 ft^3/s (14.51 m^3/s), 8.01 in/yr (204 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft^3/s (213 m^3/s) Mar. 31, 1960, gage height, 9.25 ft (2.819 m), from graph based on gage readings; no flow part of day Oct. 26, 1945; minimum daily discharge, 35 ft^3/s (0.99 m^3/s) Sept. 9, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,010 ft^3/s (142 m^3/s) Mar. 27, gage height, 8.56 ft (2.609 m); minimum daily, 237 ft^3/s (6.71 m^3/s) July 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	728	392	595	321	360	540	4260	2910	497	722	293	1200
2	689	386	482	340	370	560	4160	2650	560	641	288	1000
3	541	381	576	350	380	600	3940	2540	547	541	284	877
4	501	376	544	350	390	640	3650	2540	454	509	297	1010
5	669	371	582	350	400	680	3350	2380	442	509	321	616
6	662	355	600	350	410	720	3090	2170	448	454	437	463
7	768	350	411	350	420	820	2820	1950	454	437	442	536
8	593	345	460	350	430	920	2610	1760	509	386	442	496
9	699	355	503	350	440	1020	2400	1590	682	355	503	469
10	666	350	509	340	450	1100	2190	1520	891	392	560	440
11	588	360	509	340	460	1200	1960	1490	860	284	668	400
12	638	355	509	330	470	1300	2030	1440	817	258	634	351
13	629	381	497	320	470	1400	2390	1360	709	331	560	343
14	605	402	442	320	460	1430	2430	1280	575	335	560	331
15	587	408	413	320	450	1560	2250	1170	575	335	560	369
16	545	419	386	320	430	1660	2040	994	515	311	503	324
17	480	454	386	320	420	1690	1860	994	476	355	497	281
18	408	600	392	320	420	1840	1740	900	449	266	700	272
19	408	620	360	320	420	2760	1580	847	429	237	885	267
20	413	560	316	350	440	4300	1450	892	394	245	747	290
21	425	560	275	380	440	4610	1260	803	361	253	740	285
22	497	554	258	370	450	4720	1160	733	389	258	760	271
23	448	574	284	360	450	4700	1140	719	429	253	1030	267
24	419	641	355	350	470	4880	1130	719	414	241	1050	261
25	397	641	408	340	470	4850	1230	687	380	293	963	263
26	345	648	397	350	480	4810	1840	636	347	321	907	262
27	365	627	381	370	500	4810	2830	578	330	279	979	262
28	448	610	376	380	520	4310	3320	496	293	284	1290	262
29	442	602	381	370	---	3290	3320	460	408	279	1410	261
30	431	709	397	370	---	3580	3130	402	675	275	1540	260
31	402	---	345	360	---	4160	---	472	---	293	1450	---
TOTAL	16436	14386	13329	10711	12270	75460	72560	40082	15309	10932	22300	12989
MEAN	530	480	430	346	438	2434	2419	1293	510	353	719	433
MAX	768	709	600	380	520	4880	4260	2910	891	722	1540	1200
MIN	345	345	258	320	360	540	1130	402	293	237	284	260
CFSM	.61	.55	.50	.40	.51	2.80	2.79	1.49	.59	.41	.83	.50
IN.	.70	.62	.57	.46	.53	3.23	3.11	1.72	.66	.47	.96	.56

CAL YR 1978 TOTAL 249689 MEAN 684 MAX 2270 MIN 182 CFSM .79 IN 10.70
WTR YR 1979 TOTAL 316764 MEAN 868 MAX 4880 MIN 237 CFSM 1.00 IN 13.58

NOTE.--No gage-height record Jan. 2 to Mar. 14.

05546700 FOX RIVER NEAR CHANNEL LAKE, IL

LOCATION.--Lat 42°28'45", long 88°10'42", in SW¼ sec.10, T.46 N., R.20 E., Lake County, Hydrologic Unit 07120006, at bridge on State Highway 173, 1.3 mi (2.1 km) west of Channel Lake, 3.4 mi (5.5 km) upstream from Grass Lake, and at mile 113.6 (182.8 km).

DRAINAGE AREA.--871 mi^2 (2,256 km^2).

PERIOD OF RECORD.--Water years 1976 to current year. Additional chemical data for water years 1971-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 35.

REMARKS.--Water-discharge records from Fox River at Wilmot, Wisconsin (station 05546500) were used for this site.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT												
12...	1200	17002	17002	--	649	740	8.4	13.5	13.5	--	36	--
NOV												
02...	1300	17002	17002	--	386	820	8.7	17.0	9.0	13.8	24	18
09...	1300	17002	17002	--	350	720	8.6	14.5	8.5	13.2	36	--
DEC												
11...	1200	17002	17002	509	--	920	--	-1.0	.0	13.2	24	<100
27...	1200	17002	17002	381	--	820	8.1	-7.0	.0	13.7	16	--
MAR												
14...	1000	17002	17002	1430	--	760	7.7	-2.0	.0	8.9	32	--
APR												
02...	1300	17002	17002	--	4140	490	6.9	1.0	2.0	--	20	--
16...	1200	17002	17002	--	2040	600	8.0	13.0	9.0	11.2	36	--
24...	1100	17002	17002	--	1120	680	7.8	15.0	15.0	9.2	36	--
MAY												
15...	1400	17002	17002	--	1160	670	8.1	17.0	16.0	--	36	--
JUN												
26...	1100	17002	17002	--	347	600	--	27.0	21.5	15.4	35	91
JUL												
26...	1100	17002	17002	--	331	700	8.2	23.0	24.0	--	39	--
26...	1200	17002	17002	--	331	700	8.2	25.5	24.0	--	35	--
AUG												
21...	1100	17002	17002	--	747	600	8.1	23.5	22.0	8.0	36	570
SEP												
05...	1000	17002	17002	--	612	700	7.7	23.0	23.0	7.1	51	160

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT											
12...	--	--	--	--	1.8	.01	--	--	--	--	0
NOV											
02...	--	--	--	--	1.1	.01	--	--	--	--	0
09...	--	--	--	--	1.2	.02	--	--	--	--	0
DEC											
11...	74	62	--	--	2.5	.31	--	--	--	.07	0
27...	--	--	--	--	2.5	.37	--	--	--	--	0
MAR											
14...	--	--	16	12	3.5	.42	1.5	1.9	5.4	.12	0
APR											
02...	--	--	16	12	3.0	.07	.93	1.0	4.0	.17	0
16...	--	--	34	16	2.4	.02	.88	.90	3.3	.16	0
24...	--	--	63	13	1.3	.02	.98	1.0	2.3	.17	0
MAY											
15...	51	39	54	15	.80	.03	1.6	1.6	2.4	.16	0
JUN											
26...	--	--	77	28	.30	.02	2.2	2.2	2.5	.22	0
JUL											
26...	--	--	75	15	.80	.11	2.0	2.1	2.9	.23	4
26...	--	--	75	21	.90	.07	1.9	2.0	2.9	.24	4
AUG											
21...	--	--	66	61	1.4	.10	1.6	1.7	3.1	.22	3
SEP											
05...	--	--	32	9	1.0	.02	1.6	1.6	2.6	.20	3

05546700 FOX RIVER NEAR CHANNEL LAKE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
12...	--	0	0	20	1000	--	--	--	--	--	2
NOV											
02...	--	0	0	0	--	--	--	--	--	--	2
09...	--	0	0	0	--	--	--	.0	--	--	--
DEC											
11...	--	0	0	0	--	0	40	--	--	--	0
27...	--	0	0	0	--	10	--	--	--	--	1
MAR											
14...	--	0	0	0	--	0	--	.0	--	--	0
APR											
02...	--	0	0	0	--	10	--	.0	--	--	0
16...	--	0	0	20	--	0	--	.0	--	--	--
24...	--	0	0	0	--	0	--	.0	--	--	0
MAY											
15...	100	0	0	0	600	0	100	.0	0	.00	0
JUN											
26...	--	0	0	0	--	0	--	.0	--	--	0
JUL											
26...	--	0	0	0	--	0	--	.0	--	.00	--
26...	--	0	0	0	--	0	--	.0	--	.00	--
AUG											
21...	--	0	0	10	--	0	--	.0	--	--	--
SEP											
05...	--	0	0	0	--	0	--	.0	--	--	--

05547000 CHANNEL LAKE NEAR ANTIOCH, IL

LOCATION.--Lat 42°28'20", long 88°08'50", in NW¼NE¼ sec.14, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on right bank 30 ft (9 m) downstream from bridge on State Highway 173, at dredged channel outlet of Channel Lake, 0.8 mi (1.3 km) southwest of natural outlet, and 3 mi (5 km) west of Antioch.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft (223.418 m) National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.21 ft (0.674 m) higher.

REMARKS.--Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.29 ft (2.527 m), present datum, Apr. 6, 1960; minimum, 1.65 ft (0.503 m) Jan. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.70 ft (2.347 m) Apr. 2, 3; minimum, 2.51 ft (0.765 m) Dec. 24-30.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.13	3.93	3.54	2.59	2.80	3.10	7.62	6.54	3.99	4.24	4.18	4.95
2	4.08	3.94	3.45	2.61	2.80	3.20	7.69	6.54	4.08	4.28	4.23	4.85
3	4.07	3.94	3.38	2.62	2.81	3.29	7.67	6.51	4.13	4.28	4.28	4.67
4	4.09	3.94	3.35	2.64	2.82	3.42	7.58	6.46	4.19	4.18	4.31	4.56
5	4.21	4.02	3.26	2.65	2.83	3.59	7.52	6.49	4.10	4.17	4.39	4.46
6	4.23	3.97	3.19	2.65	2.82	3.80	7.32	6.39	4.13	4.15	4.46	4.29
7	4.30	4.00	3.12	2.66	2.84	4.08	7.09	6.30	4.22	4.12	4.46	4.09
8	4.37	4.16	3.04	2.66	2.86	4.20	6.86	6.13	4.28	4.09	4.37	4.09
9	4.44	4.07	3.00	2.73	2.87	4.48	6.63	5.87	4.43	3.97	4.42	4.11
10	4.48	4.04	3.00	2.75	2.85	4.69	6.44	5.72	4.63	4.02	4.41	4.06
11	4.49	3.94	2.98	2.75	2.87	4.83	6.22	5.55	4.69	3.97	4.32	4.04
12	4.46	3.96	2.96	2.76	2.88	4.95	6.25	5.35	4.69	3.96	4.37	4.10
13	4.41	4.14	2.93	2.78	2.90	5.06	6.19	5.22	4.64	3.99	4.39	4.09
14	4.35	4.14	2.89	2.80	2.88	5.15	6.17	5.07	4.63	4.03	4.26	4.10
15	4.38	4.12	2.84	2.80	2.88	5.18	6.07	4.92	4.62	4.03	4.21	4.16
16	4.30	4.11	2.76	2.81	2.88	5.24	5.94	4.78	4.54	3.97	4.17	4.19
17	4.35	4.27	2.73	2.84	2.99	5.26	5.79	4.75	4.35	4.08	4.24	4.23
18	4.29	4.21	2.69	2.84	3.00	5.48	5.62	4.67	4.20	4.01	4.64	4.18
19	4.28	4.10	2.64	2.86	3.04	5.96	5.48	4.53	4.09	4.01	4.74	4.17
20	4.23	4.03	2.60	2.87	3.07	6.26	5.34	4.46	4.19	4.02	4.79	4.22
21	4.26	3.99	2.58	2.88	2.91	6.70	5.18	4.32	4.09	4.05	4.75	4.13
22	4.21	3.96	2.56	2.88	2.92	7.05	5.05	4.25	4.01	4.07	4.76	4.14
23	4.13	4.00	2.56	2.88	2.95	7.27	4.90	4.12	3.94	4.10	4.80	4.15
24	4.28	3.97	2.52	2.88	2.97	7.42	4.82	3.99	3.95	4.17	4.82	4.17
25	4.26	3.92	2.51	2.84	2.97	7.58	4.85	3.99	3.97	4.15	4.79	4.16
26	4.16	3.88	2.51	2.85	2.98	7.60	5.12	4.05	4.03	4.14	4.74	4.17
27	4.13	3.87	2.51	2.86	3.07	7.54	5.43	4.04	4.04	4.18	4.71	4.18
28	4.02	3.86	2.51	2.86	3.11	7.48	5.89	4.00	4.01	4.20	4.73	4.17
29	4.00	3.77	2.51	2.82	---	7.41	6.25	3.99	4.12	4.21	4.85	4.15
30	4.00	3.63	2.52	2.81	---	7.48	6.46	3.94	4.14	4.26	4.90	4.13
31	3.91	---	2.54	2.80	---	7.53	---	3.95	---	4.22	4.96	---
MEAN	4.24	4.00	2.84	2.78	2.91	5.56	6.18	5.06	4.24	4.11	4.53	4.24
MAX	4.49	4.27	3.54	2.88	3.11	7.60	7.69	6.54	4.69	4.28	4.96	4.95
MIN	3.91	3.63	2.51	2.59	2.80	3.10	4.82	3.94	3.94	3.96	4.17	4.04

WTR YR 1979 MEAN 4.23 MAX 7.69 MIN 2.51

05547500 FOX LAKE NEAR LAKE VILLA, IL

LOCATION.--Lat 42°25'10", long 88°07'35", in SE¼SE¼ sec.36, T.46 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Columbia Bay of Fox Lake, 2.5 mi (4.0 km) west of Lake Villa.

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft (223.418 m) National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 15, 1939, nonrecording gage at same site at datum 2.26 ft (0.689 m) higher. Dec. 15, 1939, to Sept. 30, 1971, at datum 2.26 ft (0.689 m) higher.

REMARKS.--Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.18 ft (2.493 m), present datum, Apr. 6, 1960; minimum, 1.83 ft (0.558 m), present datum, Jan. 11-14, 16-18, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.64 ft (2.329 m) Apr. 2; minimum, 2.34 ft (0.713 m) Dec. 27-29.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.10	3.92	3.51	2.52	2.70	3.10	7.58	6.47	4.04	4.27	4.22	4.90
2	4.02	3.92	3.41	2.53	2.70	3.13	7.64	6.48	4.04	4.27	4.23	4.82
3	4.05	3.92	3.35	2.54	2.70	3.21	7.60	6.50	4.09	4.26	4.27	4.68
4	4.06	3.94	3.28	2.56	2.70	3.31	7.52	6.44	4.14	4.22	4.31	4.56
5	4.18	3.98	3.20	2.56	2.70	3.50	7.45	6.38	4.12	4.17	4.40	4.45
6	4.26	3.99	3.14	2.56	2.70	3.71	7.31	6.29	4.10	4.16	4.46	4.29
7	4.30	3.99	3.08	2.58	2.70	3.95	7.16	6.14	4.15	4.13	4.45	4.16
8	4.34	4.03	2.99	2.58	2.72	4.18	6.84	5.97	4.24	4.10	4.39	4.09
9	4.39	4.03	2.95	2.61	2.72	4.39	6.63	5.85	4.37	4.06	4.40	4.06
10	4.43	4.02	2.93	2.62	2.72	4.59	6.40	5.64	4.63	4.00	4.41	4.04
11	4.44	4.01	2.92	2.62	2.73	4.76	6.16	5.49	4.69	3.96	4.37	4.05
12	4.43	3.98	2.91	2.59	2.75	4.91	6.15	5.30	4.66	3.95	4.35	4.08
13	4.41	4.07	2.86	2.61	2.75	5.02	6.13	5.14	4.56	3.97	4.34	4.12
14	4.38	4.14	2.80	2.65	2.76	5.08	6.14	5.01	4.51	4.01	4.30	4.16
15	4.36	4.12	2.74	2.73	2.77	5.13	6.06	4.88	4.51	4.03	4.21	4.18
16	4.34	4.11	2.71	2.75	2.79	5.17	5.92	4.72	4.42	4.02	4.17	4.19
17	4.28	4.21	2.67	2.72	2.80	5.32	5.75	4.60	4.32	4.08	4.21	4.20
18	4.27	4.18	2.64	2.73	2.80	5.29	5.58	4.57	4.20	4.01	4.63	4.21
19	4.26	4.12	2.60	2.74	2.80	5.69	5.45	4.51	4.06	4.01	4.74	4.18
20	4.22	4.07	2.56	2.73	2.80	6.07	5.27	4.43	4.08	4.02	4.79	4.19
21	4.20	4.02	2.50	2.74	2.81	6.57	5.16	4.32	4.08	4.04	4.74	4.18
22	4.20	3.96	2.43	2.75	2.82	6.99	5.01	4.22	3.99	4.07	4.74	4.16
23	4.18	3.99	2.38	2.75	2.84	7.19	4.86	4.15	3.97	4.08	4.78	4.16
24	4.17	3.97	2.37	2.76	2.86	7.39	4.77	4.08	3.96	4.11	4.82	4.17
25	4.19	3.92	2.35	2.76	2.92	7.52	4.79	4.05	3.95	4.15	4.78	4.17
26	4.16	3.87	2.35	2.75	2.89	7.55	5.13	4.04	4.02	4.15	4.72	4.17
27	4.09	3.86	2.35	2.73	2.90	7.55	5.41	4.03	4.04	4.17	4.70	4.17
28	4.03	3.82	2.34	2.73	3.01	7.43	5.87	3.98	4.00	4.21	4.71	4.17
29	3.96	3.69	2.35	2.72	---	7.36	6.18	3.96	4.11	4.20	4.83	4.16
30	3.94	3.59	2.40	2.71	---	7.40	6.42	3.92	4.21	4.24	4.88	4.17
31	3.93	---	2.44	2.71	---	7.50	---	3.89	---	4.24	4.92	---
MEAN	4.21	3.98	2.76	2.67	2.78	5.48	6.14	5.01	4.21	4.11	4.52	4.24
MAX	4.44	4.21	3.51	2.76	3.01	7.55	7.64	6.50	4.69	4.27	4.92	4.90
MIN	3.93	3.59	2.34	2.52	2.70	3.10	4.77	3.89	3.95	3.95	4.17	4.04

WTR YR 1979 MEAN 4.18 MAX 7.64 MIN 2.34

05548000 NIPPERSINK LAKE AT FOX LAKE, IL

LOCATION.--Lat 42°24'10", long 88°10'55", in SE¼SE¼ sec.4, T.45 N., R.9 E., Lake County, Hydrologic Unit 07120006, on east shore of Nippersink Lake 300 ft (91 m) upstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge in village of Fox Lake, and at mile 106.4 (171.2 km).

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft (223.418 m) National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 16, 1939, nonrecording gage at same site at datum 2.13 ft (0.649 m) higher. Dec. 16, 1939, to Sept. 30, 1971, at datum 2.13 ft (0.649 m) higher.

REMARKS.--Gage heights estimated Jan. 21 to Feb. 22. Stage controlled by McHenry Dam on Fox River near McHenry.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.12 ft (2.475 m), present datum, Apr. 5, 1960; minimum observed, 1.70 ft (0.518 m) Feb. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.58 ft (2.310 m) Apr. 2; minimum, 2.28 ft (0.695 m) Dec. 27.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.04	3.86	3.45	2.49	2.69	3.04	7.52	6.41	3.94	4.21	4.18	4.70
2	3.97	3.86	3.36	2.50	2.69	3.08	7.57	6.41	3.94	4.22	4.18	4.66
3	3.96	3.86	3.29	2.52	2.69	3.13	7.54	6.44	4.03	4.22	4.15	4.59
4	4.00	3.89	3.23	2.53	2.69	3.30	7.46	6.37	4.05	4.21	4.19	4.44
5	4.09	3.90	3.15	2.53	2.69	3.47	7.29	6.27	4.09	4.14	4.22	4.34
6	4.19	3.94	3.09	2.54	2.69	3.67	7.20	6.19	4.06	4.09	4.32	4.17
7	4.27	3.94	3.03	2.55	2.69	3.89	6.98	6.04	4.10	4.06	4.41	4.08
8	4.30	3.89	2.94	2.55	2.69	4.11	6.79	5.90	4.21	4.02	4.34	4.02
9	4.34	3.95	2.90	2.55	2.69	4.33	6.57	5.76	4.36	3.98	4.32	3.99
10	4.38	3.97	2.88	2.55	2.70	4.54	6.34	5.57	4.51	3.93	4.29	4.00
11	4.37	4.01	2.87	2.55	2.70	4.71	6.15	5.39	4.62	3.90	4.35	3.97
12	4.36	3.97	2.85	2.55	2.71	4.85	6.06	5.24	4.63	3.90	4.33	4.01
13	4.36	3.98	2.81	2.59	2.72	4.94	6.03	5.07	4.54	3.91	4.27	4.07
14	4.33	4.04	2.75	2.66	2.72	5.02	6.02	4.94	4.48	3.94	4.22	4.08
15	4.30	4.07	2.70	2.67	2.75	5.07	5.97	4.82	4.39	3.97	4.22	4.09
16	4.31	4.09	2.66	2.68	2.76	5.10	5.84	4.68	4.33	3.99	4.17	4.11
17	4.24	4.07	2.62	2.69	2.78	5.13	5.69	4.52	4.28	3.96	4.10	4.11
18	4.21	4.07	2.59	2.69	2.78	5.19	5.53	4.49	4.18	3.95	4.13	4.13
19	4.17	4.08	2.55	2.71	2.79	5.44	5.37	4.45	4.06	3.94	4.55	4.12
20	4.15	4.04	2.50	2.74	2.79	5.87	5.22	4.36	3.97	3.96	4.69	4.10
21	4.12	3.98	2.45	2.73	2.80	6.44	5.10	4.28	3.94	3.97	4.74	4.13
22	4.14	3.92	2.37	2.70	2.80	6.86	4.94	4.17	3.96	4.00	4.69	4.10
23	4.14	3.89	2.34	2.74	2.83	7.12	4.81	4.14	3.95	4.02	4.69	4.09
24	4.06	3.87	2.31	2.75	2.85	7.33	4.72	4.09	3.93	4.03	4.70	4.09
25	4.09	3.86	2.30	2.74	2.89	7.46	4.72	4.04	3.91	4.03	4.71	4.10
26	4.09	3.84	2.30	2.73	2.94	7.49	5.08	3.99	3.92	4.07	4.71	4.10
27	4.01	3.83	2.29	2.72	2.98	7.45	5.38	3.97	3.93	4.09	4.66	4.09
28	3.98	3.72	2.30	2.70	3.01	7.36	5.82	3.94	3.96	4.09	4.65	4.10
29	3.92	3.64	2.35	2.70	---	7.31	6.08	3.91	4.06	4.16	4.73	4.10
30	3.87	3.54	2.40	2.70	---	7.31	6.33	3.90	4.16	4.15	4.77	4.10
31	3.89	---	2.46	2.70	---	7.44	---	3.91	---	4.14	4.82	---
MEAN	4.15	3.92	2.71	2.64	2.77	5.40	6.07	4.96	4.15	4.04	4.44	4.16
MAX	4.38	4.09	3.45	2.75	3.01	7.49	7.57	6.44	4.63	4.22	4.82	4.70
MIN	3.87	3.54	2.29	2.49	2.69	3.04	4.72	3.90	3.91	3.90	4.10	3.97

WTR YR 1979 MEAN 4.12 MAX 7.57 MIN 2.29

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL

LOCATION.--Lat 42°26'37", long 88°14'51", in NE¼NW¼ sec.25, T.46 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank at upstream side of bridge on Winn Road, 0.6 mi (1.0 km) west of Spring Grove and at mile 7.4 (11.9 km).

DRAINAGE AREA.--192 mi^2 (497 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

REVISED RECORDS.--WSP 2115: 1966-67(M), 1969-70(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 746.00 ft (227.381 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--13 years, 152 ft^3/s (4.305 m^3/s), 10.75 in/yr (273 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,980 ft^3/s (113 m^3/s) Feb. 20, 1971, gage height, 13.03 ft (3.972 m); minimum, 13 ft^3/s (0.37 m^3/s) Nov. 3, 1966, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1960 reached a stage of 13.7 ft (4.18 m), from information by local resident, and flood in July 1938 reached a stage of about 4 to 6 ft (1.2 to 1.8 m) higher than that in April 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 21	0215	*1820	51.5	*11.55	3.520	Apr. 13	0900	831	23.5	8.11	2.472
Apr. 1	0945	1170	33.1	9.44	2.877	Apr. 27	1715	1690	47.9	11.17	3.405

Minimum daily discharge, 51 ft^3/s (1.44 m^3/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	59	73	64	58	70	1070	972	163	224	140	242
2	77	61	79	60	57	73	871	880	166	179	110	204
3	84	61	94	59	56	80	769	790	150	148	91	180
4	81	61	109	58	58	110	626	722	138	126	87	158
5	88	62	103	57	59	170	531	599	129	112	83	143
6	86	60	97	56	59	240	438	506	121	102	84	131
7	80	59	89	56	58	300	404	436	130	96	88	118
8	77	65	84	58	58	331	376	385	183	93	87	111
9	79	62	81	56	58	346	363	349	252	91	130	110
10	80	52	79	55	60	331	353	312	351	90	203	106
11	79	52	78	54	63	298	360	307	362	87	275	106
12	78	51	77	54	64	263	633	298	288	84	240	107
13	75	73	74	54	64	238	794	288	215	82	190	103
14	72	79	79	54	64	328	628	276	186	84	130	100
15	73	70	72	54	63	328	475	263	167	81	110	98
16	72	67	70	55	62	301	387	250	141	76	95	95
17	75	95	71	55	59	286	340	236	127	68	99	92
18	74	101	69	56	57	439	316	198	125	67	300	89
19	70	86	66	56	56	895	295	191	126	67	400	84
20	68	79	70	56	57	1570	283	185	137	66	360	87
21	70	76	73	57	58	1740	271	175	130	66	342	83
22	68	73	72	57	60	1330	263	173	112	64	370	81
23	63	93	74	57	62	971	248	170	105	67	435	79
24	70	98	66	56	67	957	247	175	100	66	375	79
25	77	90	68	55	71	871	354	166	99	72	325	81
26	67	84	66	54	76	656	1050	162	96	70	280	83
27	69	88	69	55	72	545	1600	156	93	80	250	81
28	63	87	74	56	68	515	1460	150	94	110	275	79
29	62	84	65	57	---	599	1230	150	122	95	359	73
30	65	81	70	58	---	962	1090	144	239	150	383	69
31	59	---	68	59	---	1020	---	142	---	190	305	---
TOTAL	2280	2209	2379	1748	1724	17163	18125	10206	4847	3053	7001	3252
MEAN	73.5	73.6	76.7	56.4	61.6	554	604	329	162	98.5	226	108
MAX	88	101	109	64	76	1740	1600	972	362	224	435	242
MIN	59	51	65	54	56	70	247	142	93	64	83	69
CFSM	.38	.38	.40	.29	.32	2.89	3.15	1.71	.84	.51	1.18	.56
IN.	.44	.43	.46	.34	.33	3.33	3.51	1.98	.94	.59	1.36	.63

CAL YR 1978 TOTAL 42904 MEAN 118 MAX 946 MIN 32 CFSM .62 IN 8.31
WTR YR 1979 TOTAL 73987 MEAN 203 MAX 1740 MIN 51 CFSM 1.06 IN 14.33

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (COOE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (OEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
10...	1110	80010	--	--	81	--	--	13.0	13.0	--	--
12...	1500	17002	17002	--	76	670	8.2	14.0	13.5	--	24
NOV											
02...	1000	17002	17002	--	61	680	8.6	14.5	8.5	13.8	8
02...	1100	17002	17002	--	62	700	8.7	18.0	9.0	14.2	12
29...	1045	80010	--	--	89	--	--	1.0	.5	--	--
OEC											
11...	1300	17002	17002	78	--	740	--	-.5	.0	13.8	20
JAN											
09...	1330	80010	--	--	56	--	--	-10.0	.0	--	--
FEB											
13...	1535	80010	--	--	64	--	--	-5.0	.0	--	--
13...	1600	17002	17002	64	--	760	8.4	-5.0	.0	10.0	12
MAR											
14...	0900	17002	17002	--	342	720	8.3	-2.0	.0	12.8	40
20...	1540	80010	--	--	1680	--	--	9.0	4.0	--	--
APR											
02...	1400	17002	17002	--	857	550	7.1	.5	1.5	10.6	24
16...	1300	17002	17002	--	380	620	7.6	13.0	10.0	8.4	28
MAY											
08...	1330	80010	--	--	392	--	--	29.0	19.0	--	--
15...	1100	17002	17002	--	266	630	--	11.5	15.5	--	28
JUN											
19...	1600	80010	--	--	121	--	--	26.0	23.0	--	--
26...	1300	17002	17002	--	94	--	--	--	23.0	10.0	35
JUL											
24...	0820	80010	--	--	64	--	--	24.0	24.0	--	--
26...	0900	17002	17002	--	70	680	8.0	21.5	21.0	--	32
26...	1000	17002	17002	--	70	680	8.1	22.0	21.0	--	27
AUG											
21...	0900	17002	17002	--	342	600	7.6	21.0	20.0	6.7	36
SEP											
05...	0800	17002	17002	--	145	700	7.8	21.0	21.0	7.3	24
11...	1430	80010	--	--	104	--	--	25.0	22.0	--	--

05548280 NIPPERSINK CREEK NEAR SPRING GROVE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
12...	--	--	--	--	--	1.7	.00	--	--	--
NOV										
02...	54	60	35	--	--	1.0	.00	--	--	--
02...	18	63	35	--	--	1.1	.00	--	--	--
DEC										
11...	<100	--	--	--	--	1.9	.17	--	--	--
FEB										
13...	--	71	57	--	--	1.8	.42	--	--	--
MAR										
14...	--	--	--	34	17	5.0	.38	1.3	1.7	6.7
APR										
02...	--	--	--	37	14	4.8	.16	1.1	1.3	6.1
16...	--	--	--	45	16	4.4	.10	.80	.90	5.3
MAY										
15...	--	--	--	52	14	2.5	.06	1.2	1.3	3.8
JUN										
26...	180	--	--	96	25	2.3	.03	1.5	1.5	3.8
JUL										
26...	--	--	--	49	14	1.6	.15	1.2	1.4	3.0
26...	--	--	--	53	3	2.8	.14	1.3	1.4	4.2
AUG										
21...	1200	--	--	70	64	2.3	.29	1.3	1.6	3.9
SEP										
05...	370	--	--	35	10	2.7	.07	1.0	1.1	3.8

DATE	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
12...	--	--	0	0	400	0	30	--	--	5
NOV										
02...	.05	--	--	--	--	10	--	--	--	0
02...	--	--	--	--	--	10	--	--	--	1
DEC										
11...	.08	0	--	0	--	--	40	--	0	0
FEB										
13...	.12	--	--	0	--	0	--	--	--	3
MAR										
14...	.24	--	--	20	--	0	--	--	--	0
APR										
02...	.22	--	--	0	--	10	--	.0	--	0
16...	.17	--	--	20	--	0	--	--	--	--
MAY										
15...	.15	--	--	0	--	0	--	--	--	0
JUN										
26...	.26	--	--	0	--	0	--	--	--	1
JUL										
26...	.25	--	--	0	--	0	--	--	--	--
26...	.26	--	--	0	--	0	--	--	--	--
AUG										
21...	.28	--	--	10	--	0	--	--	--	--
SEP										
05...	.18	--	--	0	--	0	--	--	--	--

05548500 FOX RIVER AT JOHNSBURG, IL

LOCATION.--Lat 42°22'35", long 88°14'15", in SW¼SW¼ sec.18, T.45 N., R.9 E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Chapel Hill Road in Johnsburg, 5.5 mi (8.8 km) upstream from McHenry Dam and at mile 103.0 (165.7 km).

DRAINAGE AREA.--1,205 mi^2 (3,121 km^2).

PERIOD OF RECORD.--October 1939 to current year (gage heights only).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft (223.418 m) National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Dec. 14, 1939, nonrecording gage at same site at datum 2.16 ft (0.658 m) higher. Dec. 14, 1939, to Sept. 30, 1971, at datum 2.16 ft (0.658 m) higher.

REMARKS.--Gage heights estimated Jan. 21 to Mar. 4. Stage regulated by McHenry Dam 5.5 mi (8.8 km) downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.55 ft (2.301 m), present datum, Apr. 6, 1960; minimum, 1.43 ft (0.436 m), present datum, Mar. 9, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.07 ft (2.155 m) Apr. 1, 2; minimum, 2.15 ft (0.655 m) Dec. 22, 25-28.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.95	3.82	3.29	2.35	2.28	2.42	7.00	5.97	3.88	4.13	4.17	4.62
2	3.87	3.79	3.23	2.35	2.28	2.60	7.04	5.98	3.90	4.16	4.10	4.53
3	3.88	3.80	3.13	2.35	2.27	2.70	7.00	6.01	3.94	4.14	4.13	4.47
4	3.96	3.85	3.00	2.37	2.29	3.05	6.94	5.95	3.94	4.17	4.17	4.35
5	3.97	3.81	2.95	2.37	2.31	3.21	6.70	5.82	4.05	4.10	4.24	4.22
6	4.12	3.90	2.92	2.37	2.40	3.43	6.61	5.76	4.00	4.04	4.36	4.08
7	4.21	3.90	2.90	2.37	2.49	3.67	6.50	5.59	4.01	4.01	4.24	4.02
8	4.25	3.77	2.80	2.38	2.49	3.89	6.32	5.46	4.13	3.96	4.26	3.98
9	4.26	3.86	2.76	2.38	2.46	4.09	6.12	5.34	4.29	3.93	4.21	3.88
10	4.31	3.91	2.75	2.38	2.35	4.29	5.90	5.21	4.37	3.86	4.26	3.99
11	4.29	4.00	2.74	2.38	2.40	4.45	5.74	5.01	4.49	3.84	4.28	3.94
12	4.28	3.97	2.68	2.38	2.43	4.58	5.62	4.89	4.51	3.87	4.18	3.96
13	4.29	3.90	2.62	2.39	2.46	4.67	5.55	4.72	4.47	3.86	4.11	4.04
14	4.28	3.94	2.53	2.46	2.49	4.75	5.54	4.63	4.34	3.88	4.13	4.05
15	4.23	4.02	2.48	2.46	2.43	4.76	5.51	4.54	4.20	3.92	4.08	4.03
16	4.27	4.05	2.51	2.46	2.39	4.76	5.40	4.43	4.19	4.00	4.04	4.06
17	4.18	3.91	2.47	2.46	2.35	4.78	5.27	4.30	4.16	3.96	4.04	4.05
18	4.15	3.92	2.45	2.47	2.32	4.85	5.14	4.28	4.11	3.92	4.44	4.09
19	4.09	3.98	2.43	2.48	2.30	5.10	5.00	4.28	4.00	3.91	4.58	4.09
20	4.10	3.96	2.37	2.53	2.30	5.40	4.87	4.18	3.81	3.93	4.64	4.04
21	4.04	3.90	2.30	2.52	2.30	5.90	4.77	4.14	3.81	3.93	4.59	4.11
22	4.07	3.85	2.21	2.48	2.30	6.29	4.63	4.03	3.90	3.96	4.56	4.08
23	4.11	3.77	2.20	2.38	2.24	6.53	4.53	4.02	3.92	3.98	4.55	4.06
24	3.94	3.73	2.19	2.30	2.24	6.73	4.47	4.01	3.88	3.94	4.56	4.05
25	3.98	3.76	2.16	2.28	2.25	6.85	4.48	3.97	3.86	4.03	4.57	4.06
26	4.02	3.77	2.15	2.25	2.28	6.87	4.83	3.90	3.83	4.08	4.53	4.06
27	3.90	3.74	2.15	2.27	2.32	6.91	5.04	3.88	3.86	4.04	4.52	4.05
28	3.92	3.49	2.16	2.30	2.40	6.85	5.42	3.87	3.91	4.14	4.53	4.06
29	3.86	3.39	2.21	2.31	---	6.79	5.68	3.85	4.01	4.12	4.60	4.08
30	3.78	3.35	2.27	2.30	---	6.76	5.88	3.85	4.08	4.09	4.65	4.07
31	3.85	---	2.32	2.29	---	6.91	---	3.84	---	4.16	4.67	---
MEAN	4.08	3.83	2.56	2.38	2.35	4.99	5.65	4.70	4.06	4.00	4.35	4.11
MAX	4.31	4.05	3.29	2.53	2.49	6.91	7.04	6.01	4.51	4.17	4.67	4.62
MIN	3.78	3.35	2.15	2.25	2.24	2.42	4.47	3.84	3.81	3.84	4.04	3.88

WTR YR 1979 MEAN 3.93 MAX 7.04 MIN 2.15

05549000 BOONE CREEK NEAR MCHENRY, IL

LOCATION.--Lat 42°19'15", long 88°18'45", in NW¼SW¼ sec.4, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on left bank at upstream side of bridge on Bull Valley Road, 2.5 mi (4.0 km) southwest of McHenry and at mile 4.8 (7.7 km).

DRAINAGE AREA.--15.5 mi^2 (40.1 km^2).

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 769.56 ft (234.562 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 13.1 ft^3/s (0.371 m^3/s), 11.48 in/yr (292 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 276 ft^3/s (7.82 m^3/s) June 2, 1970, gage height, 4.87 ft (1.484 m); minimum, 1.6 ft^3/s (0.045 m^3/s) Dec. 25, 1948, gage height, 0.30 ft (0.091 m), result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft^3/s (2.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 19	1245	*145	4.11	*3.41	1.039	Apr. 26	0545	123	3.48	3.10	0.945
Mar. 29	1815	86	2.44	2.43	0.741	Aug. 5	2130	72	2.04	2.24	0.683
Apr. 12	0400	94	2.66	2.59	0.789						

Minimum discharge, 4.4 ft^3/s (0.12 m^3/s) Sept. 26.

REVISIONS.--Revised daily and monthly discharge figures, in cubic feet per second, for June 1970, are given below. These figures supersede those published in the report for 1970.

June 2..... 176 June 3..... 73

Month	Total	Mean	Max	Min	Cfsm	In.
June 1970	746	24.9	176	11	1.61	1.79
Wtr yr 1970	5262.7	14.4	176	3.9	.93	12.77
Cal yr 1970	5537.4	15.2	176	3.9	.98	13.44

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.7	13	12	9.5	11	43	41	17	21	14	15
2	12	9.7	13	11	9.8	12	48	37	18	18	13	14
3	12	9.4	16	11	9.7	14	39	50	17	16	13	13
4	11	9.7	16	10	9.5	19	36	36	16	15	12	12
5	12	9.7	14	10	9.5	24	33	32	15	14	19	9.4
6	12	10	13	10	9.5	29	28	30	16	13	27	10
7	11	10	13	10	9.5	33	29	28	19	13	20	10
8	11	9.7	12	10	9.5	34	28	26	22	12	17	11
9	11	9.4	12	10	9.5	34	28	25	37	12	31	11
10	10	9.7	12	10	9.5	32	26	24	44	12	47	10
11	10	10	12	10	9.7	29	28	26	40	14	30	9.4
12	11	10	12	9.8	10	26	62	24	27	14	22	9.4
13	11	12	11	9.6	10	30	43	23	20	12	19	9.4
14	10	12	11	9.5	10	36	36	23	19	13	17	9.7
15	10	12	12	9.5	10	30	31	22	17	11	15	9.2
16	10	11	12	9.5	10	28	29	22	16	10	12	10
17	10	14	12	9.5	9.7	32	26	21	16	10	13	9.2
18	10	14	12	9.5	9.5	67	25	21	15	10	23	8.1
19	10	13	12	9.5	9.2	126	23	21	14	9.8	21	7.6
20	10	12	13	9.5	9.2	75	23	20	16	9.7	23	7.4
21	10	12	13	9.4	9.5	58	23	19	16	10	25	7.4
22	9.7	12	13	9.2	9.7	47	22	18	15	12	34	7.9
23	10	15	13	9.0	10	48	24	17	14	10	24	8.4
24	10	14	13	9.0	10	52	25	18	13	11	20	13
25	10	14	12	9.0	11	42	30	17	13	11	16	7.1
26	10	16	12	9.0	11	36	78	17	13	11	14	6.9
27	10	19	12	9.0	12	34	62	17	17	11	16	6.9
28	9.7	16	12	9.0	11	35	60	16	25	14	16	6.7
29	9.7	15	13	9.0	---	54	51	16	30	13	20	7.4
30	9.7	14	13	9.2	---	64	51	15	23	15	18	8.1
31	9.7	---	12	9.5	---	53	---	15	---	14	16	---
TOTAL	324.5	364.0	391	300.2	277.0	1244	1090	737	600	391.5	627	284.6
MEAN	10.5	12.1	12.6	9.68	9.89	40.1	36.3	23.8	20.0	12.6	20.2	9.49
MAX	12	19	16	12	12	126	78	50	44	21	47	15
MIN	9.7	9.4	11	9.0	9.2	11	22	15	13	9.7	12	6.7
CFSM	.68	.78	.81	.63	.64	2.59	2.34	1.54	1.29	.81	1.30	.61
IN.	.78	.87	.94	.72	.66	2.99	2.62	1.77	1.44	.94	1.50	.68

CAL YR 1978 TOTAL 4981.1 MEAN 13.6 MAX 142 MIN 5.1 CFSM .88 IN 11.95
WTR YR 1979 TOTAL 6630.8 MEAN 18.2 MAX 126 MIN 6.7 CFSM 1.17 IN 15.91

05549500 FOX RIVER NEAR MCHENRY, IL

LOCATION.--Lat 42°18'35", long 88°15'05", in NW¼ sec.12, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank of main channel, 300 ft (91 m) upstream from McHenry Dam, 2.5 mi (4.0 km) downstream from McHenry and at mile 97.8 (157.4 m).

DRAINAGE AREA.--1,250 mi^2 (3,238 km^2).

PERIOD OF RECORD.--June 1941 to current year (gage heights only).

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.00 ft (223.418 m) National Geodetic Vertical Datum of 1929 (levels by Illinois Department of Transportation). Prior to Oct. 1, 1971, at datum 2.07 ft (0.631 m) higher.

REMARKS.--Stage regulated by McHenry Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.36 ft (1.939 m), present datum, Apr. 5, 1960; minimum, 0.32 ft (0.098 m), present datum, Feb. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.95 ft (1.814 m) Apr. 1, 2; minimum, 1.06 ft (0.323 m) Feb. 23.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.76	3.81	2.84	2.02	1.37	1.60	5.91	5.15	3.90	4.09	4.17	4.27
2	3.72	3.79	2.79	2.10	1.37	1.63	5.93	5.16	3.89	4.11	4.09	4.22
3	3.79	3.80	2.74	2.12	1.36	1.69	5.89	5.22	3.93	4.09	4.12	4.19
4	3.93	3.87	2.31	2.14	1.20	2.24	5.83	5.15	3.91	4.15	4.15	4.08
5	3.96	3.80	2.46	2.15	1.17	2.59	5.63	4.96	4.06	4.06	4.25	3.95
6	4.13	3.92	2.51	2.13	1.69	2.94	5.55	4.97	3.99	4.00	4.26	3.91
7	4.22	3.91	1.89	2.15	1.72	3.33	5.43	4.78	3.98	3.96	4.14	3.94
8	4.24	3.68	1.91	2.12	1.62	3.54	5.29	4.67	4.12	3.92	4.20	3.91
9	4.23	3.87	2.33	2.09	1.56	3.73	5.11	4.59	4.26	3.90	4.09	3.78
10	4.26	3.92	2.33	2.07	1.52	3.83	4.93	4.52	4.32	3.83	4.17	3.83
11	4.22	4.05	2.34	2.02	1.62	4.01	4.83	4.37	4.39	3.81	4.19	3.93
12	4.23	3.99	2.20	2.01	1.64	4.16	4.72	4.29	4.36	3.87	4.07	3.96
13	4.26	3.87	2.02	2.09	1.65	4.27	4.67	4.12	4.32	3.85	3.99	4.05
14	4.25	3.96	1.89	2.08	1.47	4.32	4.67	4.09	4.18	3.86	4.06	4.04
15	4.19	4.03	1.99	2.06	1.48	4.18	4.65	4.06	4.03	3.92	4.04	4.04
16	4.25	4.05	2.19	2.08	1.47	4.18	4.56	4.00	4.02	4.00	3.97	4.05
17	4.12	3.79	2.13	2.12	1.45	4.28	4.45	3.94	4.06	3.96	4.00	4.03
18	4.12	3.83	2.18	2.12	1.36	4.39	4.40	4.01	4.03	3.92	4.35	4.09
19	4.05	3.92	2.14	2.16	1.29	4.59	4.34	4.04	3.92	3.91	4.44	4.09
20	4.07	3.90	2.10	2.03	1.41	4.78	4.28	3.94	3.69	3.93	4.45	4.02
21	3.98	3.84	1.90	1.63	1.49	5.11	4.25	3.94	3.78	3.92	4.38	4.13
22	4.05	3.77	1.84	1.54	1.20	5.40	4.12	3.84	3.91	3.96	4.36	4.09
23	4.11	3.68	1.98	1.53	1.11	5.60	4.08	3.89	3.94	3.98	4.34	4.06
24	3.86	3.66	2.04	1.53	1.31	5.80	4.08	3.95	3.89	3.94	4.35	4.05
25	3.94	3.68	2.04	1.29	1.47	5.89	4.15	3.94	3.87	4.02	4.36	4.07
26	3.98	3.70	1.89	1.25	1.48	5.90	4.46	3.83	3.82	4.08	4.33	4.06
27	3.83	3.58	1.88	1.49	1.32	5.88	4.45	3.82	3.87	4.04	4.33	4.04
28	3.87	3.18	2.02	1.50	1.43	5.82	4.58	3.82	3.94	4.14	4.33	4.05
29	3.80	2.99	2.06	1.46	---	5.73	4.78	3.83	3.99	4.11	4.36	4.08
30	3.73	2.87	2.16	1.40	---	5.67	5.04	3.83	4.05	4.06	4.38	4.08
31	3.86	---	2.14	1.41	---	5.84	---	3.83	---	4.16	4.37	---
MEAN	4.03	3.76	2.17	1.87	1.44	4.29	4.84	4.28	4.01	3.99	4.23	4.04
MAX	4.26	4.05	2.84	2.16	1.72	5.90	5.93	5.22	4.39	4.16	4.45	4.27
MIN	3.72	2.87	1.84	1.25	1.11	1.60	4.08	3.82	3.69	3.81	3.97	3.78

WTR YR 1979 MEAN 3.59 MAX 5.93 MIN 1.11

05549600 FOX RIVER AT BURTONS BRIDGE, IL

LOCATION.--Lat 42°16'44", long 88°13'31", in SE¼NW¼ sec.19, T.44 N., R.9 E., McHenry County, Hydrologic Unit 07120006, at State Highway 176 bridge, 1.1 mi (1.8 km) downstream of Griswald Lake, 2.3 mi (3.7 km) upstream from Cotton Creek, and at mile 95.1 (153.0 km).

DRAINAGE AREA.--1,278 mi² (3,310 km²).

PERIOD OF RECORD.--July to September 1979. Additional chemical data for water years 1964, 1967-72 are published in Water-Resources Investigations 78-23 as site DT 22.

WATER QUALITY DATA, JULY TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
JUL											
26...	1300	17002	17002	700	8.5	29.0	28.0	--	106	--	49
26...	1400	17002	17002	700	8.5	29.5	28.0	--	63	--	50
AUG											
14...	1000	17002	17002	600	8.3	16.0	20.5	6.7	55	91	49
SEP											
06...	1300	17002	17002	650	8.4	26.5	25.0	9.1	48	120	50

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
JUL										
26...	41	61	26	.00	.03	2.2	2.2	2.2	.22	4
26...	43	56	25	.00	.05	2.3	2.4	2.4	.24	4
AUG										
14...	43	110	41	.30	.17	--	--	--	.33	--
SEP										
06...	36	60	19	.40	.02	--	--	--	.22	--

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
JUL										
26...	100	0	0	0	0	80	.0	0	.00	1
26...	100	0	0	0	0	80	.0	0	.00	--
AUG										
14...	--	--	--	10	0	--	.0	--	--	0
SEP										
06...	--	--	--	10	0	--	--	--	--	1

05550000 FOX RIVER AT ALGONQUIN, IL

LOCATION.--Lat 42°09'59", long 88°17'25", in NE¼NW¼ sec.34, T.43 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank 20 ft (6 m) upstream from bridge on State Highway 62 (Chicago Street) in Algonquin, 140 ft (43 m) upstream from Algonquin Dam, and at mile 81.6 (131.3 km).

DRAINAGE AREA.--1,403 mi^2 (3,634 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1175: 1916. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 729.48 ft (222.346 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 20, 1933, nonrecording gage at site 20 ft (6 m) downstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Flow regulated by McHenry Dam, 16 mi (26 km) upstream from station, and occasionally affected by wind action.

AVERAGE DISCHARGE.--64 years, 821 ft^3/s (23.25 m^3/s), 7.95 in/yr (202 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,610 ft^3/s (187 m^3/s) Apr. 6, 1960, Apr. 2, 1979; maximum gage height, 4.50 ft (1.372 m) Apr. 1, 1916, from graph based on gage readings; no flow for part of Nov. 26, 1952, Nov. 20, 1953, Oct. 25, 1956, and Sept. 9, 14, 1958, result of windstorms; minimum daily discharge, 12 ft^3/s (0.34 m^3/s) Aug. 30, 31, 1934, July 28, 1942.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,610 ft^3/s (187 m^3/s) Apr. 2, gage height, 4.00 ft (1.219 m); minimum, 263 ft^3/s (7.45 m^3/s) July 21, 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	572	1220	540	500	811	6560	4460	659	923	465	1920
2	1240	545	1220	500	510	841	6610	4520	607	937	419	1930
3	922	528	1250	480	510	920	6570	4710	616	903	420	1900
4	600	466	1200	480	510	1150	6490	4670	605	941	436	1810
5	434	421	1200	480	520	1330	6180	4490	700	882	539	1690
6	460	472	1210	490	510	1470	5940	4330	681	818	971	1520
7	527	467	1160	500	500	1580	5680	4140	669	781	1040	1190
8	569	399	1020	520	500	1630	5450	3950	799	753	1030	921
9	562	429	896	510	510	1740	5180	3790	1060	744	935	793
10	639	466	865	465	500	1790	4860	3670	1340	701	1150	709
11	784	531	852	445	510	1830	4650	3500	1500	665	1230	504
12	811	555	833	450	510	1860	4680	3320	1670	462	1130	350
13	838	479	912	470	510	1940	4590	3090	1620	373	1010	367
14	844	515	925	440	500	2140	4510	2900	1480	361	1030	378
15	795	561	894	420	500	2350	4420	2720	1270	386	1010	359
16	834	610	807	390	500	2520	4270	2530	1210	439	915	364
17	755	741	782	420	490	2650	4090	2180	1190	427	760	356
18	719	984	764	420	485	2920	3870	1820	1210	395	962	380
19	683	1070	777	430	490	3610	3580	1750	1120	357	1300	405
20	682	1060	787	420	520	4540	3320	1660	969	302	1490	352
21	628	1020	783	430	540	4810	3080	1620	804	280	1650	409
22	644	990	751	450	560	5050	2880	1520	688	290	1710	405
23	709	1000	682	450	590	5340	2690	1400	650	302	1710	374
24	589	1020	663	450	620	5740	2450	1310	622	294	1690	361
25	571	1020	654	450	703	5940	2240	1090	569	328	1680	377
26	668	1030	649	450	723	5940	2560	985	445	372	1630	373
27	767	1070	631	450	762	5960	3030	960	435	355	1610	358
28	819	1220	570	460	791	5840	3610	950	469	429	1600	363
29	801	1230	544	470	---	5960	3990	818	595	418	1670	379
30	720	1150	553	475	---	6160	4310	779	861	405	1810	392
31	625	---	567	480	---	6500	---	750	---	446	1860	---
TOTAL	22569	22621	26621	14285	15374	102862	132340	80382	27113	16469	36862	21989
MEAN	728	754	859	461	549	3318	4411	2593	904	531	1189	733
MAX	1330	1230	1250	540	791	6500	6610	4710	1670	941	1860	1930
MIN	434	399	544	390	485	811	2240	750	435	280	419	350
CFSM	.52	.54	.61	.33	.39	2.37	3.14	1.85	.64	.38	.85	.52
IN.	.60	.60	.71	.38	.41	2.73	3.51	2.13	.72	.44	.98	.58

CAL YR 1978 TOTAL 381262 MEAN 1045 MAX 3180 MIN 214 CFSM .75 IN 10.11
WTR YR 1979 TOTAL 519487 MEAN 1423 MAX 6610 MIN 280 CFSM 1.01 IN 13.77

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 06.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
19...	0930	80010	--	--	669	--	--	9.5	9.5	--	--
NOV											
02...	0800	17002	17002	--	564	650	8.9	12.0	9.5	10.4	28
DEC											
13...	1200	17002	17002	--	910	750	--	-2.0	.0	15.6	28
27...	1500	17002	17002	--	641	870	8.1	-9.0	.0	--	27
27...	1700	17002	17002	--	641	870	8.1	--	--	13.6	27
JAN											
08...	1545	80010	--	--	516	--	--	-16.0	.0	--	--
FEB											
12...	1445	80010	--	--	503	--	--	-8.0	.0	--	--
13...	1200	17002	17002	510	--	820	7.9	-4.0	.0	10.8	20
MAR											
13...	1000	17002	17002	--	1930	760	--	7.0	.0	9.6	32
26...	1530	80010	--	--	5650	--	--	.0	2.0	--	--
APR											
03...	0900	17002	17002	--	6580	520	--	4.5	3.5	12.1	120
24...	1400	17002	17002	--	2430	630	7.7	16.5	15.0	9.4	48
MAY											
21...	0900	17002	17002	--	1650	--	8.6	10.5	13.5	9.9	48
JUN											
12...	1300	17002	17002	--	1710	--	--	20.5	16.0	6.8	44
18...	1600	80010	--	--	1160	--	--	22.0	22.0	--	--
JUL											
05...	1300	17002	17002	--	895	600	8.4	21.0	23.0	--	47
05...	1400	17002	17002	--	895	600	8.4	21.0	23.0	--	95
AUG											
14...	1200	17002	17002	--	1040	600	8.3	18.0	21.0	7.4	--
SEP											
10...	1000	17002	17002	--	722	600	8.6	24.5	20.0	8.8	60
10...	1345	80010	--	--	718	--	--	28.0	22.0	--	--

05550000 FOX RIVER AT ALGONQUIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
NOV											
02...	73	61	40	--	--	.20	.06	--	--	--	--
DEC											
13...	K10	77	55	--	--	1.7	.20	--	--	--	--
27...	--	74	60	--	--	1.7	.50	--	--	--	--
27...	--	73	58	--	--	1.4	.46	--	--	--	--
FEB											
13...	--	67	60	--	--	1.9	1.2	--	--	--	.18
MAR											
13...	100	72	55	5	--	3.1	.77	1.1	1.9	5.0	.19
APR											
03...	84	48	30	26	12	3.0	.14	.86	1.0	4.0	.14
24...	--	57	36	73	19	1.0	.03	1.6	1.6	2.6	.17
MAY											
21...	140	53	53	34	6	.10	.04	2.2	2.2	2.3	.17
JUN											
12...	490	54	35	74	12	.70	.21	1.7	1.9	2.6	.20
JUL											
05...	--	54	39	60	21	.40	.13	2.0	2.1	2.5	.24
05...	--	53	39	60	22	.30	.16	1.9	2.1	2.4	.24
AUG											
14...	<100	48	42	110	37	.30	.09	2.0	2.1	2.4	.32
SEP											
10...	430	46	39	56	23	.20	.01	1.8	1.8	2.0	.23

DATE	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
NOV											
02...	--	--	--	--	--	10	--	--	--	--	2
DEC											
13...	--	--	--	0	--	10	40	--	0	--	--
27...	--	0	0	10	100	0	40	--	--	--	0
27...	200	--	0	10	100	10	80	--	--	--	1
FEB											
13...	--	--	--	0	--	0	--	--	--	--	1
MAR											
13...	--	--	--	0	--	0	--	.0	--	--	1
APR											
03...	--	--	--	0	--	50	--	--	--	--	0
24...	--	--	--	0	--	0	--	--	--	--	1
MAY											
21...	--	--	--	0	--	0	--	--	--	--	0
JUN											
12...	--	--	--	0	--	0	--	--	--	--	1
JUL											
05...	--	--	--	0	--	0	--	--	--	.00	0
05...	--	--	--	0	--	0	--	--	--	.00	0
AUG											
14...	--	--	--	20	--	0	--	--	--	--	1
SEP											
10...	--	--	--	0	--	0	--	--	--	--	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05550500 POPLAR CREEK AT ELGIN, IL

LOCATION.--Lat 42°01'35", long 88°15'20", in SE¼NW¼ sec.19, T.41 N., R.9 E., Cook County, Hydrologic Unit 07120006, on right bank 35 ft (11 m) upstream from bridge on U.S. Highway B.R. 20 (Villa Street) in Elgin, and at mile 2.3 (3.7 km).

DRAINAGE AREA.--35.2 mi^2 (91.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1338: 1952-53. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 716.00 ft (218.237 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--28 years, 23.7 ft^3/s (0.671 m^3/s), 9.14 in/yr (232 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 896 ft^3/s (25.4 m^3/s) Apr. 22, 1973, gage height, 5.45 ft (1.661 m); no flow for part of July 10, 1957, Sept. 14, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft^3/s (6.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	--	596	16.9	ice jam		Apr. 12	0145	416	11.8	3.58	1.091
Mar. 19	1015	*765	21.7	*4.97	1.515	Apr. 26	0600	321	9.09	3.19	0.972
Mar. 29	2330	421	11.9	3.60	1.097						

Minimum daily discharge, 0.96 ft^3/s (0.027 m^3/s) July 18-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	3.0	13	18	9.8	32	208	107	7.4	10	6.9	22
2	7.4	3.0	14	16	9.2	36	198	93	6.2	8.0	4.5	16
3	7.6	2.8	19	14	9.4	45	156	199	5.7	5.4	5.9	12
4	6.8	2.6	112	13	10	280	117	148	4.8	4.3	5.9	9.5
5	6.2	2.4	43	12	9.5	550	95	107	4.7	3.8	5.5	7.8
6	6.6	3.0	42	12	8.8	410	78	84	4.2	3.1	6.4	6.6
7	5.6	5.7	36	11	8.2	290	70	64	5.4	2.3	5.4	6.4
8	4.6	4.5	28	12	8.0	260	64	54	7.3	2.0	4.7	5.8
9	4.6	4.2	24	12	7.8	310	61	49	11	1.7	26	4.5
10	4.8	4.2	22	11	7.7	227	59	40	19	1.5	70	3.8
11	4.5	4.2	19	11	7.5	184	71	48	17	1.3	67	3.2
12	3.9	4.0	17	10	7.3	151	387	44	13	1.3	46	2.8
13	3.5	10	15	10	7.3	140	248	36	12	1.2	33	2.5
14	3.2	22	14	10	7.2	212	153	33	11	1.2	24	2.4
15	3.1	18	15	11	7.4	146	105	32	9.6	1.2	17	2.3
16	3.1	14	14	11	8.0	134	78	29	7.7	1.2	12	2.2
17	3.5	22	14	10	8.6	125	64	25	5.2	1.0	13	2.1
18	4.5	30	14	9.6	7.2	249	56	23	6.1	.96	66	1.8
19	3.5	27	14	9.4	8.4	696	51	21	5.9	.96	47	1.6
20	3.0	21	15	9.2	7.4	561	45	20	5.2	.96	55	1.5
21	3.1	18	30	9.4	7.3	352	45	18	4.1	.96	35	1.4
22	2.9	16	18	8.8	7.3	186	42	16	3.3	.96	29	1.5
23	3.5	24	19	9.0	9.0	162	38	15	2.6	.96	33	1.5
24	3.7	29	16	11	12	178	35	14	2.0	1.2	26	1.5
25	4.8	25	15	9.8	35	142	37	12	1.8	1.3	23	1.6
26	9.0	21	14	8.8	58	110	254	11	1.5	1.3	17	1.5
27	8.1	20	13	8.6	45	95	188	9.9	1.4	1.7	19	1.7
28	6.1	19	13	8.8	34	89	167	9.0	1.3	1.9	22	1.7
29	5.1	17	14	9.2	---	206	137	8.0	5.6	2.5	43	1.4
30	4.2	26	16	9.4	---	383	134	7.7	10	7.7	42	1.5
31	3.5	---	21	9.3	---	334	---	7.2	---	7.9	31	---
TOTAL	151.0	422.6	693	334.3	372.3	7275	3441	1383.8	202.0	81.76	841.2	132.1
MEAN	4.87	14.1	22.4	10.8	13.3	235	115	44.6	6.73	2.64	27.1	4.40
MAX	9.0	30	112	18	58	696	387	199	19	10	70	22
MIN	2.9	2.4	13	8.6	7.2	32	35	7.2	1.3	.96	4.5	1.4
CFSM	.14	.40	.64	.31	.38	6.68	3.27	1.27	.19	.08	.77	.13
IN.	.16	.45	.73	.35	.39	7.69	3.64	1.46	.21	.09	.89	.14

CAL YR 1978 TOTAL 9876.82 MEAN 27.1 MAX 526 MIN .60 CFSM .77 IN 10.44
WTR YR 1979 TOTAL 15330.06 MEAN 42.0 MAX 696 MIN .96 CFSM 1.19 IN 16.20

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	HARDNESS (MG/L AS CACO3 (00900
OCT												
10...	1600	80010	17003	4.3	815	8.4	14.0	14.0	3.0	10.7	20	39
NOV												
17...	1330	80010	17003	20	672	8.0	5.0	6.0	29	10.2	28	330
DEC												
15...	1115	80010	17003	14	1280	8.0	1.0	1.0	3.0	14.4	23	460
JAN												
23...	1115	80010	17003	8.6	1160	7.8	-4.0	5.0	17	12.9	36	450
FEB												
22...	1430	80010	17003	7.3	1320	7.6	1.5	.0	4.0	12.2	15	490
MAR												
06...	1205	80010	--	413	--	--	3.0	.5	--	--	--	--
22...	1340	80010	17003	217	520	7.6	18.0	8.0	28	10.1	13	220
APR												
19...	1345	80010	17003	46	685	7.8	18.0	13.5	37	10.0	14	300
MAY												
10...	1110	80010	17003	36	740	7.9	28.0	20.0	19	9.0	15	34
JUN												
13...	1445	80010	17003	12	760	7.9	22.0	20.0	26	8.4	11	320
JUL												
31...	1120	80010	17003	11	595	7.8	25.0	27.5	28	7.8	18	230
AUG												
28...	1135	80010	17003	21	670	7.8	22.5	20.5	28	8.3	25	300
SEP												
17...	1335	80010	17003	2.0	885	8.0	24.5	17.0	2.0	11.0	11	430

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT											
10...	88	41	30	14	.7	3.6	270	110	55	.2	5.4
NOV											
17...	76	34	31	17	.7	4.2	220	93	54	.2	6.7
DEC											
15...	100	47	92	31	1.9	3.7	280	130	160	.2	8.2
JAN											
23...	100	47	56	22	1.2	3.6	290	130	110	.3	9.5
FEB											
22...	110	50	82	27	1.6	1.4	320	140	160	.2	10
MAR											
22...	53	21	23	19	.7	2.5	130	72	42	.1	7.0
APR											
19...	72	29	25	16	.6	2.5	190	98	49	.2	5.9
MAY											
10...	78	35	25	14	.6	2.4	230	100	46	.2	5.0
JUN											
13...	74	33	31	17	.8	2.9	230	80	57	.2	7.9
JUL											
31...	52	24	34	25	1.0	2.9	160	72	56	.2	6.9
AUG											
28...	69	31	28	17	.7	3.1	220	78	47	.2	8.6
SEP											
17...	90	50	26	12	.5	3.0	310	100	52	.2	10

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)
OCT									
10...	494	.67	5.74	3	0	.70	3.1	.00	.01
NOV									
17...	443	.60	24.0	43	5	1.1	5.1	.01	.04
DEC									
15...	736	1.00	28.6	12	3	2.5	11	.00	.03
JAN									
23...	653	.89	15.3	24	24	1.7	7.6	.02	.07
FEB									
22...	750	1.02	14.8	14	10	1.7	7.9	.01	.05
MAR									
22...	295	.40	173	23	17	2.5	11	.01	.06
APR									
19...	430	.58	53.4	40	34	1.4	6.3	.00	.02
MAY									
10...	462	.63	45.3	38	30	1.4	6.5	.01	.04
JUN									
13...	443	.60	14.4	55	49	1.9	8.8	.05	.17
JUL									
31...	365	.50	11.0	41	33	.65	2.9	.02	.09
AUG									
28...	414	.56	23.5	64	54	.81	3.6	.00	.01
SEP									
17...	531	.72	2.87	3	2	1.4	6.5	.00	.00

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT									
10...	.07	.00	.00	.62	.69	.07	.03	.01	<100
NOV									
17...	.07	.07	.10	.85	.93	.10	.00	.05	<100
DEC									
15...	.07	.07	.10	.78	.85	.00	.10	.00	<100
JAN									
23...	.31	.31	.40	.70	1.0	.11	.00	.03	<100
FEB									
22...	.15	.15	.20	.62	.77	.05	.00	.00	<100
MAR									
22...	.07	.07	.10	.70	.77	.07	.01	.06	<100
APR									
19...	.00	.00	.00	.85	.85	.08	.00	.10	<100
MAY									
10...	.00	.00	.00	.85	.85	.08	.02	.03	<100
JUN									
13...	.00	.15	.20	1.1	1.0	.19	.06	.05	<100
JUL									
31...	.07	.00	.00	.85	.93	.20	.08	.14	<100
AUG									
28...	.07	.00	.00	1.0	1.0	.15	.00	.06	<100
SEP									
17...	.07	.00	.00	.47	.54	.00	.00	.00	<100

05550500 POPLAR CREEK AT ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT 10...	100	100	<5	<5	<5	<5	<5	<5	300	10
NOV 17...	100	100	<5	<5	<5	<5	10	10	2400	80
DEC 15...	100	100	<5	<5	<5	<5	<5	<5	400	10
JAN 23...	100	100	<5	<5	<5	<5	<5	<5	900	10
FEB 22...	100	100	<5	<5	<5	<5	<5	<5	300	40
MAR 22...	100	100	<5	<5	<5	<5	10	10	1600	30
APR 19...	100	100	<5	<5	10	10	10	<5	2600	20
MAY 10...	100	100	<5	<5	10	10	10	<5	1500	30
JUN 13...	100	100	<5	<5	<5	<5	<5	<5	2200	30
JUL 31...	100	100	<5	<5	<5	<5	10	10	1900	<10
AUG 28...	100	100	<5	<5	<5	<5	10	<5	2500	20
SEP 17...	100	100	<5	<5	<5	<5	10	<5	200	10

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 10...	<50	<50	<5	30	10	<50	<5	200	30	10
NOV 17...	<50	<50	<5	30	30	<50	<5	190	20	<5
DEC 15...	<50	<50	<5	40	30	<50	<5	230	10	10
JAN 23...	<50	<50	10	90	40	<50	<5	280	30	<5
FEB 22...	30	<50	<5	80	80	10	<5	240	20	20
MAR 22...	60	<50	<5	20	10	<10	<5	130	20	10
APR 19...	20	<50	<5	60	30	<10	<5	160	20	10
MAY 10...	<10	<50	<5	80	50	<10	<5	180	30	10
JUN 13...	10	<50	<5	160	60	10	<5	190	40	10
JUL 31...	10	<50	<5	120	50	10	<5	200	20	<5
AUG 28...	10	<50	<5	110	30	<10	<5	210	20	10
SEP 17...	10	<50	10	30	10	<10	<5	220	10	<5

05551000 FOX RIVER AT SOUTH ELGIN, IL

LOCATION.--Lat 41°59'40", long 88°17'40", in NW¼ sec.35, T.41 N., R.8 E., Kane County, Hydrologic Unit 07120007, at bridge on State Street, 0.6 mi (1.0 km) west of South Elgin, 1.3 mi (2.1 km) upstream from Brewster Creek, 1.5 mi (2.4 km) downstream from Poplar Creek, and at mile 67.2 (108.1 km).

DRAINAGE AREA.--1,556 mi^2 (4,030 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1960, 1964-67, 1969-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
13...	1000	80010	--	880	--	--	12.0	12.5	--	--
NOV										
01...	1100	17002	17002	583	680	8.5	13.5	10.5	11.6	36
01...	1200	17002	17002	583	670	8.5	14.5	10.5	11.6	32
28...	1330	80010	--	1160	--	--	-6.0	1.5	--	--
DEC										
13...	0900	17002	17002	955	830	--	-3.0	.0	14.4	28
13...	1000	17002	17002	955	820	--	-2.0	.0	14.4	28
JAN										
08...	1330	80010	--	565	--	--	-14.0	.0	--	--
FEB										
12...	1300	80010	--	603	--	--	-2.0	.0	--	--
13...	0900	17002	17002	596	840	8.1	-6.5	.0	13.6	20
MAR										
13...	1400	17002	17002	2300	760	--	12.0	.5	11.8	52
26...	1330	80010	--	6280	--	--	1.0	2.0	--	--
APR										
04...	1200	17002	17002	7220	--	--	5.5	4.5	12.3	28
24...	1500	17002	17002	--	630	7.7	15.5	15.0	9.7	88
MAY										
07...	1245	80010	--	4610	--	--	19.0	15.5	--	--
21...	1300	17002	17002	1730	--	8.6	14.5	19.0	.0	44
JUN										
12...	0900	17002	17002	1730	--	--	20.0	16.0	7.5	36
18...	1140	80010	--	1270	--	--	17.0	22.0	--	--
JUL										
05...	1100	17002	17002	909	650	8.2	19.5	22.0	--	49
05...	1200	17002	17002	909	650	8.2	19.5	22.0	--	61
23...	1245	80010	--	309	--	--	31.0	26.0	--	--
AUG										
14...	1400	17002	17002	--	600	8.2	20.0	21.0	3.8	4
SEP										
10...	1215	80010	--	760	--	--	24.0	21.0	--	--
10...	1300	17002	17002	749	610	8.5	30.0	21.0	9.4	56

05551000 FOX RIVER AT SOUTH ELGIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
NOV								
01...	1700	66	55	--	--	.60	.20	--
01...	1400	62	50	--	--	.70	.20	--
DEC								
13...	250	76	62	--	--	1.6	.46	--
13...	650	77	60	--	--	1.7	.47	--
FEB								
13...	--	69	63	--	--	1.5	1.6	--
MAR								
13...	970	75	58	24	13	3.5	.83	1.1
APR								
04...	2400	52	34	38	3	3.4	.22	1.6
24...	--	105	67	12	11	.00	10	--
MAY								
21...	1200	56	41	43	10	.30	.15	3.4
JUN								
12...	2200	54	41	71	5	1.4	.48	1.3
JUL								
05...	360	59	50	--	--	1.0	.16	2.0
05...	--	56	47	--	--	2.1	.18	1.9
AUG								
14...	380	49	46	100	30	.40	.23	2.1
SEP								
10...	370	50	45	67	26	.50	.02	1.8

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV								
01...	--	--	.14	--	0	--	--	3
01...	--	--	.15	--	0	--	--	2
DEC								
13...	--	--	.11	--	10	--	--	1
13...	--	--	.12	--	10	--	--	1
FEB								
13...	--	--	.24	0	0	--	--	1
MAR								
13...	1.9	5.4	.28	0	20	.0	--	1
APR								
04...	1.8	5.2	.20	20	20	.0	--	0
24...	1.7	1.7	3.2	0	0	--	--	1
MAY								
21...	3.6	3.9	.24	0	0	--	--	1
JUN								
12...	1.8	3.2	.27	0	0	--	--	0
JUL								
05...	2.2	3.2	.30	10	0	--	.00	0
05...	2.1	4.2	.48	--	0	.0	.00	0
AUG								
14...	2.3	2.7	.31	10	0	--	--	0
SEP								
10...	1.8	2.3	.32	10	0	--	--	1

05551200 FERSON CREEK NEAR ST. CHARLES, IL

OCATION.--Lat 41°56'00", long 88°20'30", in NE¼SE¼ sec.20, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on right bank at upstream side of bridge on Randall Road, 2.4 mi (3.9 km) northwest of St. Charles, and at mile 2.2 (3.5 km).

RAINAGE AREA.--51.7 mi^2 (133.9 km^2).

ERIOD OF RECORD.--December 1960 to current year.

EVISED RECORDS.--WDR IL-75: Drainage area.

AGE.--Water-stage recorder. Datum of gage is 704.84 ft (214.835 m) National Geodetic Vertical Datum of 1929.

.EMARKS.--Records good except those for winter periods and those for period of no gage-height record, Dec. 1 to Jan. 7, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--18 years (water years 1962-79), 38.9 ft^3/s (1.102 m^3/s), 10.22 in/yr (260 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,620 ft^3/s (45.9 m^3/s) Feb. 20, 1971, gage height, 7.64 ft (2.329 m); maximum gage height, 9.66 ft (2.944 m) Feb. 8, 1965, from floodmark, ice jam; minimum discharge, 0.1 ft^3/s (0.003 m^3/s) on several days in 1961, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft^3/s (16 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
'ar. 19	1615	*1250	35.4	*6.76	2.060	Apr. 26	0930	761	21.6	5.45	1.661
ar. 29	2300	880	24.9	5.80	1.768	Aug. 10	1215	715	20.2	5.31	1.618
pr. 12	0830	668	18.9	5.16	1.573						

Minimum discharge, 5.3 ft^3/s (0.15 m^3/s) July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	14	23	27	18	36	214	159	41	37	39	55
2	23	13	24	25	18	60	300	143	33	30	30	47
3	24	13	26	25	18	180	206	372	30	23	43	39
4	23	14	44	23	19	450	167	195	26	39	36	36
5	23	13	36	22	20	380	150	142	29	29	29	33
6	22	16	30	21	19	318	120	120	26	23	64	30
7	20	15	27	21	18	228	115	105	28	19	38	26
8	18	13	25	20	18	224	114	93	47	18	28	25
9	18	13	22	20	18	236	108	83	152	18	119	23
10	17	12	20	19	18	186	97	76	134	16	541	22
11	17	13	20	19	18	160	121	86	93	14	282	20
12	17	13	21	19	18	133	479	79	62	13	125	19
13	16	26	20	20	17	133	211	72	51	13	85	19
14	14	38	22	19	17	217	157	71	43	13	67	19
15	14	28	24	19	18	160	129	72	37	15	50	18
16	16	23	23	20	19	128	108	63	33	12	42	17
17	14	45	21	20	18	136	96	58	30	9.6	93	16
18	14	53	22	20	17	309	88	54	42	8.3	343	15
19	14	37	23	20	17	1090	81	52	39	8.3	187	14
20	14	30	25	21	17	956	78	49	40	8.0	195	14
21	13	27	30	23	18	427	76	45	34	7.8	155	14
22	13	25	34	23	20	290	72	43	27	7.4	145	13
23	14	42	30	23	29	322	68	42	24	8.0	160	14
24	15	42	27	22	34	430	71	41	22	7.2	110	14
25	17	33	26	21	39	255	96	38	22	9.6	80	13
26	23	30	23	21	39	197	526	35	20	10	65	13
27	19	30	25	20	37	184	285	35	20	9.2	63	12
28	17	31	23	20	34	216	316	33	19	42	63	12
29	16	25	23	20	---	437	219	31	53	23	116	12
30	15	23	29	19	---	581	229	30	54	86	91	13
31	14	---	35	18	---	349	---	30	---	86	65	---
TOTAL	540	750	803	650	610	9408	5097	2547	1311	662.4	3549	637
MEAN	17.4	25.0	25.9	21.0	21.8	303	170	82.2	43.7	21.4	114	21.2
MAX	26	53	44	27	39	1090	526	372	152	86	541	55
MIN	13	12	20	18	17	36	68	30	19	7.2	28	12
CFSM	.34	.48	.50	.41	.42	5.86	3.29	1.59	.85	.41	2.21	.41
IN.	.39	.54	.58	.47	.44	6.77	3.67	1.83	.94	.48	2.55	.46

CAL YR 1978 TOTAL 13089.0 MEAN 35.9 MAX 725 MIN 2.4 CFSM .69 IN 9.42
WTR YR 1979 TOTAL 26564.4 MEAN 72.8 MAX 1090 MIN 7.2 CFSM 1.41 IN 19.11

05551540 FOX RIVER AT MONTGOMERY, IL

LOCATION.--Lat 41°43'46", long 88°20'19", in SW¼ sec.33, T.38 N., R.8 E., Kane County, Hydrologic Unit 07120007, at bridge on Mill Street, 0.2 mi (0.3 km) east of Montgomery, 1.1 mi (1.8 km) upstream from small right-bank tributary, 3.2 mi (5.1 km) upstream from Waubansee Creek, and at mile 45.9 (73.9 km).

DRAINAGE AREA.--1,732 mi² (4,486 km²).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1964, 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DT 38.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT											
03...	1200	17002	17002	1250	580	8.5	17.0	18.0	--	56	--
05...	1110	80010	--	725	--	--	13.5	16.0	--	--	--
30...	1400	80010	--	849	--	--	16.0	10.0	--	--	--
NOV											
16...	1500	17002	17002	700	650	--	5.5	5.5	10.8	24	--
DEC											
11...	1400	80010	--	1150	--	--	2.0	2.5	--	--	--
12...	1200	17002	17002	1050	820	--	4.0	.0	14.2	24	--
12...	1300	17002	17002	1050	820	--	4.0	.0	14.2	24	--
FEB											
01...	1225	80010	--	732	--	--	-10.0	.5	--	--	--
14...	0800	17002	17002	--	920	8.0	-6.0	.0	13.2	20	200
MAR											
08...	1440	80010	--	3200	--	--	3.0	.5	--	--	--
22...	1500	17002	17002	7410	580	7.8	18.5	6.0	11.9	98	--
APR											
04...	0900	17002	17002	8020	560	--	5.5	5.0	10.8	24	1100
25...	1100	17002	17002	2900	640	--	--	15.0	9.0	48	2700
26...	1420	80010	--	5370	--	--	7.0	9.5	--	--	--
MAY											
17...	0900	17002	17002	2850	570	8.5	17.0	16.0	--	56	--
30...	1300	80010	--	999	--	--	27.5	17.0	--	--	--
JUN											
25...	1500	17002	17002	780	820	--	26.5	20.0	--	51	--
JUL											
25...	1400	17002	17002	420	800	8.3	25.5	25.5	--	52	4200
25...	1500	17002	17002	420	800	8.4	25.5	25.5	7.4	48	3600
AUG											
16...	1000	17002	17002	1120	600	7.9	20.0	19.0	8.5	56	730
20...	1435	80010	--	2330	--	--	29.0	23.0	--	--	--
SEP											
11...	1000	17002	17002	780	650	8.5	21.0	21.0	--	48	--

05551540 FOX RIVER AT MONTGOMERY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT											
03...	63	46	--	--	.90	.15	--	--	--	.30	--
NOV											
16...	67	58	--	--	1.3	.48	--	--	--	.16	--
DEC											
12...	78	62	--	--	3.2	.46	--	--	--	.10	0
12...	75	60	--	--	1.8	.46	--	--	--	.09	5
FEB											
14...	70	68	--	--	4.0	1.7	--	--	--	.23	0
MAR											
22...	60	41	72	14	3.6	.35	1.5	1.9	5.5	.27	0
APR											
04...	50	33	29	2	3.2	.18	.82	1.0	4.2	.20	0
25...	62	41	92	26	1.5	.16	1.9	2.1	3.6	.24	0
MAY											
17...	57	38	84	26	.50	.07	2.2	2.3	2.8	.26	0
JUN											
23...	60	50	81	36	.40	.02	2.3	2.3	2.7	.30	0
25...	50	60	81	36	.40	.02	2.3	2.3	2.7	.30	0
JUL											
25...	63	70	70	28	.10	.01	2.3	2.3	2.4	2.3	4
25...	61	67	60	23	.10	.03	2.4	2.4	2.5	.41	4
AUG											
16...	52	47	96	26	3.7	.04	2.2	2.2	5.9	.41	3
SEP											
11...	52	48	64	32	.60	.00	1.6	1.6	2.2	.33	3

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
03...	--	--	--	--	--	10	--	--	--	--	2
NOV											
16...	--	--	--	10	300	20	40	--	0	.00	2
DEC											
12...	--	0	0	0	--	10	30	.0	0	--	1
12...	--	0	0	0	--	10	30	.0	0	--	0
FEB											
14...	--	0	0	0	--	0	--	.0	--	--	1
MAR											
22...	--	0	0	0	--	20	--	.0	--	.00	0
APR											
04...	--	0	0	0	--	10	--	.0	--	--	0
25...	--	0	0	0	--	0	--	.0	--	--	1
MAY											
17...	100	0	0	0	1000	0	--	.0	0	.00	0
JUN											
23...	--	0	0	0	--	0	--	.0	--	--	0
25...	--	0	0	0	--	0	--	.0	--	--	0
JUL											
25...	--	0	0	10	--	0	--	.0	--	.00	--
25...	--	0	0	0	--	0	--	.0	--	.00	--
AUG											
16...	--	0	0	10	--	0	--	.0	--	--	0
SEP											
11...	--	0	0	0	--	0	--	.0	--	--	1

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL

LOCATION.--Lat 41°40'18", long 88°26'29", in SE¼NW¼ sec.21, T.37 N., R.7 E., Kendall County, Hydrologic Unit 07120007, on right bank 300 ft (91 m) upstream from bridge on State Highway 47, 2.0 mi (3.2 km) north of Yorkville and at mile 3.3 (5.3 km).

DRAINAGE AREA.--70.2 mi^2 (181.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 612.34 ft (186.641 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--19 years, 50.2 ft^3/s (1.422 m^3/s), 9.71 in/yr (247 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft^3/s (37.4 m^3/s) May 17, 1974, gage height, 8.58 ft (2.615 m); minimum, 0.1 ft^3/s (0.003 m^3/s) Dec. 7, 1962, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 240 ft^3/s (6.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1900	433	12.3	6.07	1.850	Apr. 13	0430	629	17.8	6.67	2.033
Mar. 20	1615	*1250	35.4	*8.30	2.530	Apr. 27	1145	476	13.5	6.07	1.850
Mar. 30	2330	634	18.0	6.69	2.039	May 4	0715	430	12.2	5.86	1.786
Apr. 3	0815	463	13.1	6.01	1.832						

Minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	23	36	39	27	48	441	231	56	35	31	35
2	46	24	33	38	26	52	355	197	52	32	26	30
3	48	23	39	36	26	55	434	346	51	32	26	26
4	44	24	56	35	28	130	303	391	50	110	25	25
5	43	23	82	34	31	300	247	249	52	88	23	28
6	41	26	65	34	27	370	204	193	51	61	22	28
7	37	28	45	35	23	350	185	168	52	54	21	25
8	35	26	37	37	23	322	186	152	54	48	20	23
9	33	26	32	35	25	308	215	137	52	45	25	22
10	33	26	28	32	27	270	186	124	67	43	26	23
11	31	23	29	30	28	228	188	125	70	40	37	21
12	31	21	31	29	30	196	393	120	58	40	27	20
13	30	21	29	28	28	186	556	109	54	38	21	21
14	43	54	33	32	26	231	325	105	51	41	21	21
15	43	44	37	31	25	222	230	105	46	39	20	19
16	40	38	34	28	24	187	190	98	42	36	19	17
17	37	47	30	30	24	182	171	92	41	33	21	17
18	29	71	34	29	23	234	156	88	41	31	56	17
19	31	56	33	28	24	496	146	87	42	31	66	17
20	30	58	33	31	23	1230	138	83	41	29	82	17
21	28	43	37	30	22	1030	128	79	40	29	88	17
22	25	41	42	29	22	646	122	76	38	28	60	17
23	29	50	38	28	28	490	116	74	36	27	52	16
24	31	56	36	29	45	514	115	73	33	28	41	16
25	35	49	33	28	60	531	130	70	32	30	34	19
26	38	45	32	28	56	366	264	67	32	28	29	16
27	36	44	31	30	52	281	439	65	31	27	28	16
28	31	43	30	34	50	264	342	62	31	26	28	15
29	28	40	36	30	---	321	281	60	33	26	43	16
30	26	40	50	28	---	492	272	58	47	42	83	17
31	25	---	55	27	---	620	---	56	---	54	48	---
TOTAL	1087	1133	1195	972	853	11152	7458	3940	1376	1251	1149	617
MEAN	35.1	37.8	38.5	31.4	30.5	360	249	127	45.9	40.4	37.1	20.6
MAX	50	71	82	39	60	1230	556	391	70	110	88	35
MIN	25	21	28	27	22	48	115	56	31	26	19	15
CFSM	.50	.54	.55	.45	.43	5.13	3.55	1.81	.65	.58	.53	.29
IN.	.58	.60	.63	.52	.45	5.91	3.95	2.09	.73	.66	.61	.33

CAL YR 1978 TOTAL 22642.6 MEAN 62.0 MAX 770 MIN 8.0 CFSM .88 IN 12.00
WTR YR 1979 TOTAL 32183.0 MEAN 88.2 MAX 1230 MIN 15 CFSM 1.26 IN 17.05

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	STREAM-FLOW (CFS) (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT										
05...	1240	80010	--	--	42	--	--	12.0	14.5	--
11...	1200	17002	17002	--	32	830	7.8	16.0	14.0	9.6
30...	1100	80010	--	--	27	--	--	11.0	9.0	--
NOV										
16...	1200	17002	17002	--	37	780	8.0	4.5	4.5	12.4
16...	1300	17002	17002	--	37	790	8.0	4.5	4.5	12.2
DEC										
11...	1045	80010	--	--	28	--	--	1.5	2.0	--
12...	1500	17002	17002	31	--	760	--	3.0	.0	15.2
FEB										
01...	1000	80010	--	--	27	--	--	-12.0	.0	--
06...	1000	17002	17002	27	--	780	7.9	-6.5	.0	11.6
MAR										
08...	1130	80010	--	--	349	--	--	3.5	1.0	--
20...	1710	80010	--	--	1250	--	--	8.0	5.0	--
21...	1200	17002	17002	--	1010	300	7.5	10.0	6.0	12.0
APR										
04...	0800	17002	17002	--	315	550	--	4.5	5.5	10.5
25...	0700	17002	17002	--	125	700	7.8	17.0	14.5	10.2
26...	1100	80010	--	--	251	--	--	16.0	14.0	--
MAY										
17...	1200	17002	17002	--	96	690	7.7	20.5	--	--
30...	1130	80010	--	--	56	--	--	24.0	17.0	--
JUN										
25...	1400	17002	17002	--	32	750	--	25.0	22.0	--
JUL										
25...	1200	17002	17002	--	30	700	8.0	25.0	24.5	8.4
25...	1300	17002	17002	--	30	700	7.9	25.5	24.5	7.3
AUG										
16...	0800	17002	17002	--	19	650	8.1	13.5	16.0	--
20...	1130	80010	--	--	76	--	--	25.0	20.5	--
SEP										
11...	0800	17002	17002	--	22	700	8.0	19.0	20.0	--

05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
11...	12	640	96	31	--	--	2.5	.01	--	--
NOV										
16...	16	--	95	34	--	--	2.8	.01	--	--
16...	8	--	97	33	--	--	3.2	.01	--	--
DEC										
12...	16	--	88	30	--	--	3.4	.02	--	--
FEB										
06...	8	--	98	36	--	--	2.6	.29	.51	.80
MAR										
21...	39	250	--	--	48	4	3.8	.12	.98	1.1
APR										
04...	20	640	--	--	54	4	5.3	.08	--	--
25...	24	770	--	--	54	9	3.3	.06	.94	1.0
MAY										
17...	20	--	--	--	32	12	3.6	.03	.57	.60
JUN										
25...	16	--	89	28	--	--	2.6	.02	.58	.60
JUL										
25...	24	2700	--	--	80	15	1.0	.03	.87	.90
25...	20	2800	--	--	82	16	1.3	.02	.78	.80
AUG										
16...	16	1400	--	--	42	4	2.0	.06	.64	.70
SEP										
11...	12	--	--	--	23	11	.90	.00	.50	.50

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT										
11...	--	.08	--	--	--	--	--	--	--	0
NOV										
16...	--	.05	0	--	0	60	--	--	--	2
16...	--	.04	10	--	0	60	--	--	--	1
DEC										
12...	--	.03	0	--	10	80	--	--	--	1
FEB										
06...	3.4	.07	0	--	0	--	.0	--	--	--
MAR										
21...	4.9	.34	0	3600	0	--	.0	--	.00	1
APR										
04...	--	.20	20	--	20	--	--	--	--	--
25...	4.3	.12	0	--	0	--	--	--	--	--
MAY										
17...	4.2	.10	0	--	0	--	--	0	--	--
JUN										
25...	3.2	.12	0	1100	--	110	--	--	.00	0
JUL										
25...	1.9	.15	0	--	0	130	--	--	--	--
25...	2.1	.15	0	--	0	130	--	--	--	--
AUG										
16...	2.7	.13	0	--	0	--	--	--	--	--
SEP										
11...	1.4	.07	0	--	0	--	--	--	--	--

05551995 SOMONAUK CREEK AT SHERIDAN, IL

LOCATION.--Lat 41°32'37", long 88°41'12", in NW¼NW¼ sec.5, T.35 N., R.5 E., La Salle County, Hydrologic Unit 07120007, at bridge on county road, 1.0 mi (1.6 km) north of Sheridan, 8.5 mi (13.7 km) downstream from Lake Holiday Dam, and at mile 0.4 (0.6 km).

DRAINAGE AREA.--83.3 mi^2 (215.7 km^2).

PERIOD OF RECORD.--July to September 1979. Additional chemical data for water years 1968-69, 1971-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DTB 01.

WATER QUALITY DATA, JULY TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
JUL								
09...	1400	17002	17002	630	8.3	31.0	25.5	19
AUG								
13...	1300	17002	17002	480	8.1	24.5	22.0	12
SEP								
10...	1300	17002	17002	620	7.3	25.5	22.0	12
10...	1400	17002	17002	590	8.5	25.5	22.0	12

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
JUL							
09...	44	11	4.1	.04	.01	10	0
AUG							
13...	25	3	.90	.00	.00	0	0
SEP							
10...	5	--	1.6	.00	.00	0	0
10...	7	--	1.6	.00	.00	0	0

05552500 FOX RIVER AT DAYTON, IL

LOCATION (revised).--Lat 41°23'12", long 88°47'26", in SW¼SE¼ sec.29, T.34 N., R.4 E., La Salle County, Hydrologic Unit 07120007, on right bank at upstream side of county road bridge on property of North Counties Hydro-Electric Co. in Dayton, and at mile 5.3 (8.5 km).

DRAINAGE AREA.--2,642 mi² (6,843 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 730: 1931. WSP 1208: 1930, 1935, 1939. WSP 1308: 1916(M), 1922(M), 1926-31(M), 1934-40(M), 1946-47(M). WDR IL-75: Drainage area. WDR IL-76: 1969.

GAGE.--Water-stage recorder. Datum of gage is 462.30 ft (140.909 m) above National Geodetic Vertical Datum of 1929. Prior to Apr. 13, 1925, nonrecording gage at site 4.1 mi (6.6 km) upstream at datum 496.80 ft (151.425 m) above Memphis dam. Apr. 13, 1925, to Sept. 30, 1942, nonrecording gage at site 500 ft (152 m) upstream at datum 7.70 ft (2.347 m) below NGVD. Apr. 11, 1951, to Sept. 30, 1978, water-stage recorder, and Oct. 1, 1942, to Apr. 10, 1951, nonrecording gage at site 500 ft (152 m) upstream at same datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--64 years (water years 1916-79), 1,657 ft³/s (46.93 m³/s), 8.52 in/yr (216 mm/yr), discharge for site at Wedron adjusted for difference in drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,100 ft³/s (1,330 m³/s) Oct. 11, 1954, gage height, 24.63 ft (7.507 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of computation of peak flow over dam; maximum gage height, 36.47 ft (11.116 m) Jan. 25, 1960, ice jam; minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Aug. 29, 1934, when turbines were shut down; minimum daily with plant operating, 78 ft³/s (2.21 m³/s) Oct. 29, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,200 ft³/s (200 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 5	--	10500	297	ice jam	
Mar. 20	0715	*29800	844	*17.35	5.288
Mar. 30	1800	21000	595	15.40	4.694
Apr. 12	2045	19600	555	15.03	4.581
Apr. 26	2030	11500	326	12.53	3.819
May 3	1445	16100	456	14.02	4.273

Minimum daily discharge, 590 ft³/s (16.7 m³/s) July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2400	1180	1940	760	1050	2200	15600	8340	1680	1540	1160	2820
2	2190	1100	1770	900	1050	2600	14400	7910	1540	1540	947	2740
3	2140	1050	2120	1100	1050	3000	13800	14900	1380	1520	946	2660
4	1920	1030	2270	1400	1050	3500	11800	12200	1380	1910	979	2550
5	1560	977	2480	1280	1050	9000	10700	9590	1420	2000	897	2450
6	1330	945	2280	1220	1100	9200	9730	8400	1410	1660	870	2290
7	1050	1030	1480	1180	1100	9020	9150	7500	1420	1500	1240	2140
8	1110	993	1440	1150	1100	7700	8780	6970	1630	1380	1450	1810
9	1180	953	1550	1100	1050	7330	8600	6480	3090	1380	1620	1490
10	1200	898	1250	1080	1050	6290	8080	6070	3640	1320	1980	1260
11	1190	882	1380	1060	1000	5390	8320	6050	3700	1250	3140	1160
12	1300	906	1890	1150	1000	4460	17000	5510	3270	1170	2490	1040
13	1400	1040	1900	1200	1050	4220	14900	5160	3190	1080	1950	790
14	1300	1420	1760	1250	1100	7110	10300	4860	3160	998	1690	653
15	1370	1320	1820	1200	1100	6640	8660	4670	2830	978	1630	694
16	1350	1250	1680	1150	1100	6220	7760	4320	2450	857	1600	693
17	1370	1370	1740	1100	1100	6720	7310	4050	2310	834	1430	676
18	1320	1970	1520	1200	1150	9310	6870	3640	2160	851	2380	606
19	1280	2000	1560	1200	1150	21400	6440	3260	2300	782	2730	628
20	1150	1930	1490	1150	1200	28900	5970	3050	2110	747	4610	685
21	1200	1950	1450	1150	1300	26200	5600	2870	1980	680	3690	616
22	1130	1830	1400	1150	1500	20500	5250	2780	1680	630	2900	620
23	1160	1940	1520	1150	1750	18900	4910	2670	1420	626	3570	652
24	1280	2160	1590	1100	1880	20000	4630	2560	1280	590	3300	667
25	1160	2040	1250	1100	1800	16600	4670	2430	1200	638	2900	616
26	1200	1950	1080	1100	1700	12400	9020	2210	1140	694	2650	617
27	1230	1960	1030	1100	1700	11100	9820	2120	1060	671	2480	621
28	1280	1960	1020	1050	1900	11100	9110	1950	929	679	2400	620
29	1340	1970	1120	1050	---	14300	8380	1860	953	823	2550	602
30	1330	1980	1350	1050	---	19800	9150	1760	1500	802	3200	597
31	1290	---	1120	1050	---	18800	---	1700	---	1540	2980	---
TOTAL	42710	43984	49250	34880	35130	349910	274710	157840	59212	33670	68359	36063
MEAN	1378	1466	1589	1125	1255	11290	9157	5092	1974	1086	2205	1202
MAX	2400	2160	2480	1400	1900	28900	17000	14900	3700	2000	4610	2820
MIN	1050	882	1020	760	1000	2200	4630	1700	929	590	870	597
CFSM	.52	.56	.60	.43	.48	4.27	3.47	1.93	.75	.41	.84	.46
IN.	.60	.62	.69	.49	.49	4.93	3.87	2.22	.83	.47	.96	.51

CAL YR 1978 TOTAL 830104 MEAN 2274 MAX 12800 MIN 558 CFSM .86 IN 11.69
WTR YR 1979 TOTAL 1185718 MEAN 3249 MAX 28900 MIN 590 CFSM 1.23 IN 16.70

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
04...	1100	17002	17002	--	1920	655	8.6	14.5	15.5	--	40
23...	1200	17002	17002	--	1130	705	8.9	14.5	12.0	--	36
25...	1100	80010	--	--	1230	--	--	11.5	10.0	--	--
NOV											
15...	1200	17002	17002	--	1310	--	--	--	6.5	--	--
15...	1300	17002	17002	--	1310	780	8.5	8.0	6.5	--	24
DEC											
05...	1520	80010	--	--	2640	--	--	3.0	.0	--	--
19...	0900	17002	17002	--	1640	890	8.2	1.0	.0	--	16
JAN											
09...	1115	80010	--	--	1260	--	--	-7.0	.0	--	--
FEB											
22...	1300	17002	17002	1500	--	1500	8.4	-1.0	.0	--	12
27...	1330	80010	--	--	1710	--	--	2.0	.0	--	--
MAR											
08...	1045	80010	--	--	7590	--	--	4.5	1.0	--	--
20...	1450	80010	--	--	28400	--	--	12.0	4.0	--	--
22...	1250	80010	--	--	20600	--	--	5.5	2.0	--	--
28...	1200	17002	17002	--	11100	630	6.7	5.5	3.5	--	32
APR											
13...	1420	80010	--	--	13700	--	--	19.5	10.0	--	--
25...	1200	17002	17002	--	4650	670	8.2	18.5	13.0	9.8	20
MAY											
14...	1400	17002	17002	--	4800	635	8.2	16.5	14.5	--	36
24...	1330	80010	--	--	2500	--	--	19.0	17.0	--	--
JUN											
06...	1300	17002	17002	--	1430	620	8.6	24.5	24.0	--	44
06...	1400	17002	17002	--	1430	600	8.9	25.5	24.5	--	44
JUL											
09...	1200	17002	17002	--	1380	700	8.7	31.0	25.5	--	42
23...	1100	17002	17002	--	580	610	8.8	29.5	27.0	--	39
AUG											
13...	1100	17002	17002	--	2010	520	7.9	22.0	22.0	--	8
SEP											
10...	0800	17002	17002	--	1260	670	8.7	19.0	20.0	--	52
10...	0900	17002	17002	--	1240	690	8.5	20.0	22.0	--	48

05552500 FOX RIVER AT DAYTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT										
04...	--	59	37	55	17	3.0	.01	--	--	--
23...	--	65	45	30	16	1.3	.02	--	--	--
NOV										
15...	--	--	--	--	--	--	--	--	--	--
15...	--	68	48	19	10	3.2	.06	--	--	--
DEC										
19...	230	73	55	5	--	3.5	.33	--	--	--
FEB										
22...	--	72	55	1	--	2.8	1.7	--	--	--
MAR										
28...	--	47	30	65	16	6.6	.20	--	--	--
APR										
25...	--	63	34	90	25	5.1	.05	1.2	1.3	6.4
MAY										
14...	--	57	33	82	20	3.2	.03	1.5	1.5	4.7
JUN										
06...	--	64	45	44	12	1.4	.40	2.0	2.4	3.8
06...	--	67	45	53	21	2.0	.70	1.6	2.3	4.3
JUL										
09...	--	64	44	45	11	2.1	.03	1.9	1.9	4.0
23...	--	67	55	73	31	.10	.04	2.6	2.6	2.7
AUG										
13...	--	49	38	240	58	1.3	.05	1.9	2.0	3.3
SEP										
10...	--	60	45	42	12	.80	.00	2.0	2.0	2.8
10...	--	61	44	50	17	.90	.00	1.7	1.7	2.6

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
04...	--	0	0	0	0	500	10	.0	10
23...	.22	0	0	0	0	400	0	.0	1
NOV									
15...	--	0	0	0	0	--	0	.0	--
15...	.19	0	0	0	10	200	0	.0	1
DEC									
19...	.12	0	0	0	0	200	0	.0	1
FEB									
22...	.30	0	0	0	0	200	0	.0	1
MAR									
28...	.24	0	0	0	0	1400	10	.0	0
APR									
25...	.14	0	0	0	0	800	0	.0	0
MAY									
14...	.22	0	0	0	0	1300	0	.0	0
JUN									
06...	.20	0	0	0	0	200	0	.1	0
06...	.25	0	0	0	0	200	0	.0	0
JUL									
09...	.30	0	0	0	0	700	0	.1	0
23...	.32	3	0	0	10	400	0	.1	1
AUG									
13...	.58	--	0	10	10	2400	0	.0	1
SEP									
10...	.34	3	0	0	10	600	0	.1	1
10...	.32	2	0	0	10	600	0	.0	0

05554490 VERMILION RIVER AT MCDOWELL, IL

LOCATION.--Lat 40°49'42", long 88°34'29", in SW¼ sec.6, T.27 N., R.6 E., Livingston County, Hydrologic Unit 07130002, at county road bridge, 0.3 mi (0.5 km) east of McDowell, 0.4 mi (0.6 km) downstream from Turtle Creek, 7.3 mi (11.7 km) downstream from confluence of North and South Branches, and at mile 68.4 (110.0 km).

DRAINAGE AREA.--551 mi^2 (1,427 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water-discharge records from Vermilion River at Pontiac (station 05554500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (OEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)
OCT												
16...	1200	17002	17002	--	11	770	8.6	11.5	9.5	--	17	--
NOV												
20...	1100	17002	17002	--	26	840	8.7	2.0	6.5	--	12	--
DEC												
18...	1200	17002	17002	--	43	890	8.5	3.5	1.0	14.2	9	--
JAN												
22...	1000	17002	17002	--	19	850	8.4	-4.5	.0	9.4	7	70
FEB												
26...	1300	17002	17002	190	--	380	8.7	-3.5	.5	--	12	--
MAR												
21...	1100	17002	17002	4160	--	470	7.7	8.0	5.5	9.7	19	K100
APR												
16...	1000	17002	17002	--	1680	600	7.9	14.5	6.0	10.6	20	360
MAY												
17...	1000	17002	17002	--	292	715	8.3	26.0	19.0	9.1	13	K40
JUN												
13...	1100	17002	17002	--	183	650	8.2	22.0	21.0	7.2	12	480
	1200	17002	17002	--	183	650	8.2	22.0	21.0	--	14	K500
JUL												
12...	1100	17002	17002	--	92	720	8.2	32.0	26.5	8.5	17	220
12...	1200	17002	17002	--	92	720	8.2	32.0	26.5	--	14	250
AUG												
21...	1300	17002	17002	--	3340	300	7.5	26.5	23.5	--	32	1900
SEP												
26...	1300	17002	17002	--	20	700	8.2	25.5	21.0	--	11	K20

K Results based on colony count outside the acceptable range (non-ideal colony count).

05554490 VERMILION RIVER AT MCDOWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
16...	.0	242	130	--	81	6	1.6	.00	.70	.70
NOV										
20...	.0	252	133	33	14	4	.80	.00	.50	.50
DEC										
18...	.0	280	125	35	3	2	5.0	.00	--	--
JAN										
22...	.0	302	121	29	4	1	4.2	.40	.20	.60
FEB										
26...	.0	161	50	17	80	4	8.8	.10	--	--
MAR										
21...	.0	109	45	20	85	8	10	.10	--	--
APR										
16...	.0	150	59	21	142	22	12	.00	--	--
MAY										
17...	.0	208	78	--	77	6	12	.00	--	--
JUN										
13...	.0	224	69	--	116	9	10	.10	--	--
13...	.0	224	70	--	118	1	11	.10	--	--
JUL										
12...	.0	229	79	--	206	24	8.5	.00	--	--
12...	.0	232	80	--	107	11	8.0	.00	--	--
AUG										
21...	.0	91	29	--	186	6	4.1	.00	--	--
SEP										
26...	.0	213	117	--	41	6	2.2	.00	--	--

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT										
16...	2.3	.11	0	0	0	2530	40	--	.0	20
NOV										
20...	1.3	--	--	--	0	230	0	60	.0	0
DEC										
18...	--	--	--	--	10	150	0	30	.0	--
JAN										
22...	4.8	--	--	--	0	2600	0	80	.0	400
FEB										
26...	--	--	--	--	0	760	0	80	.0	100
MAR										
21...	--	--	--	--	10	1400	0	60	.0	10
APR										
16...	--	--	--	--	0	1000	0	70	.0	0
MAY										
17...	--	--	--	--	0	1100	0	70	.0	10
JUN										
13...	--	--	--	--	10	2400	0	140	.0	0
13...	--	--	--	--	0	2400	0	140	.1	0
JUL										
12...	--	--	--	--	0	2300	0	80	.0	0
12...	--	--	--	--	0	2400	0	90	.0	0
AUG										
21...	--	--	--	--	0	1600	0	120	.0	20
SEP										
26...	--	--	--	--	0	1000	0	90	.0	0

05554500 VERMILION RIVER AT PONTIAC, IL

LOCATION.--Lat 40°52'40", long 88°38'10", in SW¼ sec.22, T.28 N., R.5 E., Livingston County, Hydrologic Unit 07130002, near center of span on downstream side of Vermilion Street Bridge in Pontiac, 0.1 mi (0.2 km) upstream from Illinois Central Gulf Railroad bridge and State Highway 116, 0.8 mi (1.3 km) upstream from Turtle Creek, and 1.5 mi (2.4 km) downstream from Norfolk & Western Railway bridge, and at mile 60.3 (97.0 km).

DRAINAGE AREA.--579 mi^2 (1,500 km^2).

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 619.45 ft (188.808 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1965, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. An average of 1.4 ft^3/s (0.040 m^3/s), diverted 0.5 mi (0.8 km) above station for water supply of city of Pontiac, is not included in records. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--37 years, 378 ft^3/s (10.70 m^3/s), 8.87 in/yr (225 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft^3/s (385 m^3/s) July 10, 1951, gage height, 17.90 ft (5.456 m), from graph based on gage readings; no flow Oct. 13, 14, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1815	*7970	226	[a]*16.27	4.959	Apr. 27	0630	2860	81.0	7.94	2.420
Mar. 14	1315	4130	117	9.79	2.984	May 4	0530	2530	71.6	7.45	2.271
Mar. 20	0600	5670	161	12.19	3.716	July 15	0600	2100	59.5	6.81	2.076
Mar. 30	1015	2840	80.4	7.91	2.411	Aug. 21	1000	3590	102	8.99	2.740
Apr. 13	0500	7790	221	14.64	4.462						

[a]ice jam

Minimum daily discharge, 10 ft^3/s (0.28 m^3/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	17	46	130	15	370	2040	1340	153	63	153	164
2	23	16	49	100	15	410	1650	1100	143	57	146	143
3	28	14	69	80	15	550	1570	1790	133	51	133	124
4	30	15	115	60	15	5000	1310	2340	127	334	113	107
5	23	16	136	45	15	7600	1220	1630	124	875	94	94
6	21	16	90	35	13	7000	1140	1200	127	486	79	84
7	21	20	70	25	15	5000	924	963	127	282	66	74
8	20	23	60	20	15	5600	810	795	127	197	67	69
9	20	22	55	20	15	5400	814	670	216	160	60	61
10	16	19	50	20	15	4650	761	579	310	136	57	54
11	16	34	50	20	15	3070	1140	519	264	116	57	54
12	16	41	46	25	15	2040	6410	468	214	94	49	51
13	17	26	46	25	15	1930	7360	421	190	84	39	43
14	17	16	45	25	15	3830	4810	388	176	434	31	38
15	17	16	45	25	15	2890	2670	361	156	1910	31	37
16	13	16	48	20	15	2050	1720	330	140	1050	29	35
17	16	21	45	20	15	2010	1260	302	127	561	25	32
18	13	22	45	20	15	2210	1010	288	124	340	64	29
19	12	26	45	20	15	4470	834	284	113	240	220	29
20	12	26	44	20	15	5500	721	275	99	178	2090	27
21	12	23	45	20	15	4160	624	251	89	143	3480	23
22	10	22	56	20	20	2850	567	228	84	118	2560	26
23	12	30	52	20	35	2210	513	213	77	99	1640	24
24	14	42	51	20	70	2090	496	210	73	89	1830	23
25	17	51	43	18	130	2220	721	193	63	186	1300	21
26	20	49	42	18	190	1680	1760	186	59	1040	745	21
27	30	48	33	18	250	1320	2730	189	52	694	525	21
28	28	42	32	19	300	1360	2280	182	54	484	404	17
29	26	40	33	15	---	2170	1780	160	56	302	316	17
30	18	40	79	15	---	2750	1540	156	61	221	255	17
31	17	---	177	15	---	2410	---	153	---	178	199	---
TOTAL	580	809	1849	953	1308	96800	53235	18164	3858	11402	16857	1559
MEAN	18.7	27.0	59.6	30.7	46.7	3123	1775	586	129	368	544	52.0
MAX	30	51	177	130	300	7600	7360	2340	310	1910	3480	164
MIN	10	14	32	15	13	370	496	153	52	51	25	17
CFSM	.03	.05	.10	.05	.08	5.39	3.07	1.01	.22	.64	.94	.09
IN.	.04	.05	.12	.06	.08	6.22	3.42	1.17	.25	.73	1.08	.10

CAL YR 1978 TOTAL 103604.2 MEAN 284 MAX 2860 MIN 6.3 CFSM .49 IN 6.66
WTR YR 1979 TOTAL 207374.0 MEAN 568 MAX 7600 MIN 10 CFSM .98 IN 13.32

05555300 VERMILION RIVER NEAR LEONORE, IL

LOCATION.--Lat 41°12'30", long 88°55'51", in SW¼SW¼ sec.30, T.32 N., R.3 E., La Salle County, Hydrologic Unit 07130002, on downstream left pier of county highway bridge, 3 mi (5 km) northeast of Leonore, 6.2 mi (10.0 km) downstream from Otter Creek, 8 mi (13 km) northwest of Streator, and at mile 17.2 (27.7 km).

DRAINAGE AREA.--1,251 mi^2 (3,240 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1931 to current year. Prior to October 1971, published as "at Lowell."

REVISED RECORDS.--WSP 745: 1931-32. WSP 1308: 1932(M), 1935-38(M), 1940(M), 1942(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 520.58 ft (158.673 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 20, 1952, nonrecording gage at site 6.8 mi (10.9 km) downstream at datum 19.97 ft (6.086 m) lower. Aug. 20, 1952, to Sept. 30, 1971, nonrecording gage at site 6.7 mi (10.8 km) downstream at datum 19.97 ft (6.086 m) lower.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--48 years, 782 ft^3/s (22.15 m^3/s), 8.49 in/yr (216 mm/yr); discharge for site at Lowell adjusted for difference in drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,500 ft^3/s (949 m^3/s) July 15, 1958, gage height, 15.30 ft (4.663 m), from graph based on gage readings, site and datum then in use; minimum, 5.0 ft^3/s (0.14 m^3/s) Feb. 1-5, 1961, Dec. 21-24, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft^3/s (200 m^3/s), revised, and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1345	*21200	600	*23.46	7.151	Mar. 29	2315	11900	337	17.17	5.233
Mar. 14	2100	9190	260	15.08	4.596	Apr. 12	2345	19400	549	22.24	6.779
Mar. 19	2345	17200	487	20.83	6.349	Aug. 20	1515	13500	382	18.35	5.593

Minimum discharge, 19 ft^3/s (0.54 m^3/s) Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	57	115	360	90	800	4630	3040	326	160	276	440
2	94	51	118	260	89	850	4580	2560	319	148	241	370
3	105	48	162	180	88	1200	4010	3480	308	146	220	320
4	104	46	298	135	87	9000	3350	4270	294	502	203	270
5	106	48	397	110	85	20000	3040	3640	294	1410	179	230
6	101	57	316	98	80	15200	2680	2770	273	1250	155	200
7	85	67	285	91	81	13300	2280	2190	315	735	135	180
8	74	63	245	86	85	13300	1980	1770	385	498	118	160
9	68	69	210	88	82	12300	1850	1470	424	398	118	140
10	65	69	180	90	80	10000	1720	1280	519	330	103	110
11	63	69	175	93	78	6640	2140	1560	536	287	99	96
12	59	65	160	96	79	4580	15300	1310	461	247	101	91
13	56	73	150	99	81	4020	16400	1140	429	211	90	88
14	52	94	140	104	83	8220	10400	1030	390	280	75	80
15	49	83	130	103	84	7080	6070	946	369	1270	67	70
16	49	71	140	98	81	4830	4010	852	330	1950	52	65
17	45	85	130	96	79	5440	3060	777	297	1070	32	63
18	43	83	130	93	76	7150	2430	728	349	631	198	60
19	44	101	130	94	76	15000	1990	689	420	424	522	57
20	44	96	140	96	78	14200	1690	640	365	340	9810	55
21	42	87	140	97	90	9330	1740	594	301	295	6510	52
22	40	79	150	96	105	6440	1290	549	257	255	4290	50
23	54	109	140	96	160	5020	1170	519	229	220	4490	50
24	47	116	140	94	240	5040	1090	482	211	200	3030	48
25	50	140	130	92	340	4860	1210	456	195	400	2460	46
26	54	131	120	95	410	3890	3370	429	182	1800	1630	44
27	53	140	110	96	560	3200	4840	424	169	1500	1100	44
28	60	135	100	94	710	3320	4870	407	164	900	798	40
29	62	127	100	92	---	7620	4060	381	157	650	699	37
30	65	115	130	90	---	9210	3510	357	157	440	600	37
31	62	---	420	90	---	6070	---	341	---	326	540	---
TOTAL	2003	2574	5431	3502	4257	237110	120760	41081	9425	19273	38941	3593
MEAN	64.6	85.8	175	113	152	7649	4025	1325	314	622	1256	120
MAX	108	140	420	360	710	20000	16400	4270	536	1950	9810	440
MIN	40	46	100	86	76	800	1090	341	157	146	32	37
CFSM	.05	.07	.14	.09	.12	6.11	3.22	1.06	.25	.50	1.00	.10
IN.	.06	.08	.16	.10	.13	7.05	3.59	1.22	.28	.57	1.16	.11

CAL YR 1978 TOTAL 269796 MEAN 739 MAX 7670 MIN 13 CFSM .59 IN 8.02
WTR YR 1979 TOTAL 487950 MEAN 1337 MAX 20000 MIN 32 CFSM 1.07 IN 14.51

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)
OCT												
04...	0900	17002	17002	--	102	720	8.4	14.5	15.5	--	20	--
23...	0900	17002	17002	--	48	845	8.6	11.0	12.0	--	12	--
25...	1300	80010	--	--	52	--	--	18.0	11.0	--	--	--
NOV												
15...	0900	17002	17002	--	82	880	8.3	8.0	5.5	--	20	--
DEC												
11...	1315	80010	--	--	176	--	--	1.0	.0	--	--	--
20...	1400	17002	17002	140	--	1060	8.8	2.0	1.5	--	16	--
JAN												
12...	1100	80010	--	--	96	--	--	-5.0	.0	--	--	--
FEB												
22...	0900	17002	17002	105	--	990	8.6	1.5	1.0	--	15	--
27...	1120	80010	--	--	543	--	--	.0	.0	--	--	--
MAR												
05...	1630	80010	--	--	21300	--	--	.0	.0	--	--	--
28...	0900	17002	17002	--	3340	690	8.1	3.5	3.5	--	16	--
APR												
13...	1000	80010	--	--	17700	--	--	9.0	9.5	--	--	--
25...	0900	17002	17002	--	1170	740	7.5	15.5	13.0	8.9	12	--
MAY												
14...	0900	17002	17002	--	1030	715	7.8	16.5	14.5	--	16	--
24...	1035	80010	--	--	477	--	--	18.0	16.0	--	--	--
JUN												
06...	0900	17002	17002	--	276	720	8.4	21.0	20.0	--	16	--
	1000	17002	17002	--	273	740	8.4	22.0	21.0	--	16	--
JUL												
23...	1300	17002	17002	220	--	730	8.5	31.0	28.5	--	0	--
31...	1430	80010	80010	--	322	655	8.5	30.0	27.5	--	--	.0
AUG												
13...	0800	17002	17002	--	92	660	8.4	19.0	22.0	--	12	--
17...	0850	80010	--	--	36	--	--	19.0	21.0	--	--	--
28...	1320	80010	--	--	771	665	7.8	26.5	22.5	--	--	.0
SEP												
10...	1100	17002	17002	110	--	730	8.3	25.0	22.0	--	20	--
10...	1200	17002	17002	110	--	730	8.3	25.0	22.0	--	20	--

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)
OCT												
04...	--	--	--	--	7	--	4.4	.00	--	--	--	--
23...	--	--	--	--	6	--	2.9	.00	--	--	--	--
NOV												
15...	--	--	--	--	10	9	2.4	.15	--	--	--	--
DEC												
20...	--	--	--	--	1	--	6.3	.60	--	--	--	--
FEB												
22...	--	--	--	--	1	--	3.3	2.0	--	--	--	--
MAR												
28...	--	--	--	--	41	12	12	.10	--	--	--	--
APR												
25...	.0	210	--	78	41	8	12	.11	--	--	--	--
MAY												
14...	--	--	--	--	26	4	14	.06	--	--	--	--
JUN												
06...	.0	230	--	96	34	8	9.7	.06	1.0	--	--	--
06...	.0	230	--	98	30	7	9.5	.04	--	--	--	--
JUL												
23...	.0	240	--	87	57	11	8.9	.06	--	--	--	--
31...	.0	210	1.3	55	--	--	--	--	--	--	--	--
AUG												
13...	.0	230	--	100	21	6	4.3	.06	--	--	--	--
28...	.0	240	7.4	58	--	--	--	--	--	0	<10	<1
SEP												
10...	.0	250	--	110	11	6	3.8	.02	--	--	--	--
10...	.0	240	--	105	10	5	4.4	.02	--	--	--	--

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)
OCT											
04...	--	0	--	300	--	--	--	10	--	--	--
23...	--	0	--	400	--	--	--	0	--	--	--
NOV											
15...	--	340	--	400	--	--	--	0	--	--	--
DEC											
20...	--	0	--	400	--	--	--	10	--	--	--
FEB											
22...	--	0	--	600	--	--	--	0	--	--	--
MAR											
28...	--	0	--	1200	--	--	--	0	--	--	--
APR											
25...	--	0	--	600	--	--	--	0	--	20	--
MAY											
14...	--	0	--	500	--	--	--	0	--	--	--
JUN											
06...	--	0	--	400	--	--	--	0	--	30	--
06...	--	0	--	500	--	--	--	0	--	40	--
JUL											
23...	--	0	--	500	--	--	--	0	--	50	--
31...	--	--	--	1300	1300	20	--	--	--	30	30
AUG											
13...	--	10	--	400	--	--	--	0	--	40	--
28...	10	--	140	1500	1500	10	4100	--	60	50	40
SEP											
10...	--	10	--	300	--	--	--	0	--	20	--
10...	--	10	--	300	--	--	--	0	--	30	--

05555300 VERMILION RIVER NEAR LEONORE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
04...	--	--	.6	--	--	--	--	--	--	--	--
23...	--	--	.0	--	--	--	--	--	--	--	--
NOV											
15...	--	--	.0	--	--	--	--	--	--	--	--
DEC											
20...	--	--	.0	--	--	--	--	--	--	--	--
FEB											
22...	--	--	.0	--	--	--	--	--	--	--	--
MAR											
28...	--	--	.0	--	--	--	--	--	--	--	--
APR											
25...	--	--	.0	--	--	0	--	--	--	--	--
MAY											
14...	--	--	.0	--	--	--	--	--	--	--	--
JUN											
06...	--	--	.0	--	--	0	--	--	--	--	--
06...	--	--	.0	--	--	0	--	--	--	--	--
JUL											
23...	--	--	.0	--	--	0	--	1	--	--	--
31...	0	--	--	--	--	--	--	--	37	32	95
AUG											
13...	--	--	.0	--	--	0	--	--	--	--	--
28...	10	400	--	.00	0	--	40	--	62	129	76
SEP											
10...	--	--	.3	--	--	0	--	--	--	--	--
10...	--	--	.0	--	--	0	--	--	--	--	--

05555950 LITTLE VERMILION RIVER AT LA SALLE, IL

LOCATION.--Lat 41°20'00", long 89°04'51", in SW¼SE¼ sec.14, T.33 N., R.1 E., La Salle County, Hydrologic Unit 07130001, at east edge of La Salle, 4.1 mi (6.6 km) downstream from Tomahawk Creek and at mile 0.7 (1.1 km).

DRAINAGE AREA.--125 mi^2 (324 km^2).

PERIOD OF RECORD.--July to September 1979. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DR 01.

WATER QUALITY DATA, JULY TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
JUL										
09...	1000	17002	17002	--	8.4	30.0	23.5	15	89	36
AUG										
20...	1300	17002	17002	245	8.1	26.5	24.0	80	23	11
SEP										
19...	1300	17002	17002	1020	8.4	21.0	21.0	12	130	87
19...	1400	17002	17002	990	8.4	21.0	21.0	12	135	86

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
JUL										
09...	67	3	7.0	.18	1.2	0	1400	0	.1	1
AUG										
20...	1100	130	1.8	.20	--	40	19300	50	.0	0
SEP										
19...	11	7	1.5	.30	--	0	300	0	--	0
19...	8	7	1.4	.27	--	0	300	0	--	0

05556200 ILLINOIS RIVER AT HENNEPIN, IL

LOCATION.--Lat 41°15'26", long 89°20'45", in NW¼ sec.9, T.32 N., R.2 W., Putnam County, Hydrologic Unit 07130001, at bridge on State Highways 26 and 71 in Hennepin, 0.6 mi (1.0 km) upstream from Coffee Creek and at mile 207.6 (334.0 km).

DRAINAGE AREA.--12,756 mi² (33,038 km²).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1967-69, 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 16.

REMARKS.--Water-discharge records for Illinois River at Marseilles (station 05543500) and Illinois River at Kingston Mines (station 05568500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
NOV										
01...	1100	17002	17002	5930	810	8.2	15.5	13.0	--	20
27...	1100	17002	17002	6480	930	8.1	4.5	2.0	--	28
DEC										
20...	0900	17002	17002	5870	1080	--	2.0	1.5	--	28
FEB										
07...	0900	17002	17002	5340	1220	8.4	-5.0	.0	--	20
MAR										
26...	0900	17002	17002	44000	620	8.3	2.0	4.5	--	20
APR										
09...	1300	17002	17002	30600	670	8.2	1.0	5.5	--	16
MAY										
02...	1300	17002	17002	41600	630	6.5	18.5	12.0	11.4	16
23...	1200	17002	17002	13300	710	8.1	19.0	20.0	--	28
23...	1300	17002	17002	13300	740	8.0	19.0	20.0	--	32
JUL										
11...	1500	17002	17002	12900	610	7.9	32.0	30.0	--	51
AUG										
20...	1100	17002	17002	27900	640	7.6	26.5	24.0	--	32
SEP										
19...	1000	17002	17002	9880	780	7.9	19.0	21.0	--	20
19...	1200	17002	17002	9880	760	8.1	19.0	21.0	--	28

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
NOV									
01...	--	33	8	3.9	1.4	0	800	0	--
27...	91	12	9	2.9	2.6	20	700	10	.0
DEC									
20...	--	9	--	3.2	1.6	0	600	10	.0
FEB									
07...	--	1	--	2.6	3.3	10	400	0	--
MAR									
26...	--	39	9	6.4	.46	0	2000	10	.1
APR									
09...	--	41	11	7.4	.48	0	1500	0	.0
MAY									
02...	--	63	8	7.2	.42	0	1000	0	.0
23...	--	67	18	--	.30	0	1100	0	.0
23...	--	78	18	5.3	.41	0	1800	0	.0
JUL									
11...	--	250	39	5.5	.40	20	3600	0	.0
AUG									
20...	--	160	21	2.8	.78	30	4600	0	.1
SEP									
19...	--	42	13	3.1	.59	10	700	0	.0
19...	--	130	24	3.0	.61	20	2400	0	.3

05556500 BIG BUREAU CREEK AT PRINCETON, IL

LOCATION.--Lat 41°21'55", long 89°29'55", in SW¼SE¼ sec.18, T.16 N., R.9 E., Bureau County, Hydrologic Unit 07130001, on right bank 500 ft (152 m) downstream from bridge on U.S. Highways 6 and 34, 0.6 mi (1.0 km) downstream from Epperson Run, 1.5 mi (2.4 km) west of Princeton, and at mile 20.5 (33.0 km).

DRAINAGE AREA.--196 mi^2 (508 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1936 to current year. Prior to October 1974, published as Bureau Creek at Princeton.

REVISED RECORDS.--WSP 1175: 1940-41, 1948. WSP 1308: 1942(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 555.24 ft (169.237 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 18, 1940, nonrecording gage at bridge 400 ft (122 m) upstream a datum 30.00 ft (9.144 m) lower. July 18, 1940, to Sept. 30, 1944, water-stage recorder at site 500 ft (152 m) upstream at present datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--43 years, 131 ft^3/s (3.710 m^3/s), 9.08 in/yr (231 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s (354 m^3/s) May 17, 1974, gage height, 16.01 ft (4.880 m), from rating curve extended above 11,800 ft^3/s (334 m^3/s); no flow during January 1940 and for sever days in October and November 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage heigh (m
Mar. 20	0645	*7160	203	*11.99	3.655	Mar. 30	0215	4720	134	9.72	2.9(
Mar. 23	1415	4260	121	9.26	2.822	Apr. 26	0745	3220	91.2	8.16	2.48

Minimum discharge, 5.7 ft^3/s (0.16 m^3/s) Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	32	107	56	56	60	989	659	97	62	18	61
2	58	32	91	54	55	65	1120	593	90	53	17	60
3	56	32	104	52	54	114	871	846	86	55	17	53
4	54	31	82	51	53	299	715	665	84	114	17	44
5	54	31	130	50	52	692	627	544	89	137	17	37
6	50	34	95	50	51	862	526	479	83	75	54	33
7	47	34	78	50	50	775	490	426	82	59	92	30
8	45	33	81	50	50	738	456	385	128	53	43	28
9	43	32	90	50	50	771	415	346	246	47	50	26
10	43	31	96	51	51	676	376	313	300	44	48	25
11	43	30	93	52	52	584	444	328	340	40	127	23
12	41	30	84	52	54	538	1420	325	236	36	67	21
13	44	38	82	52	55	541	842	287	279	35	40	20
14	40	39	78	51	56	752	614	272	243	53	29	18
15	37	54	75	50	57	643	501	261	197	80	26	17
16	36	48	78	49	56	563	436	233	163	46	22	15
17	36	77	80	48	54	624	391	220	145	35	19	14
18	37	160	65	48	53	1120	357	211	135	29	647	13
19	37	143	70	49	53	4920	332	200	176	29	250	12
20	36	115	74	50	55	6550	318	184	225	29	1140	11
21	35	101	68	51	62	3950	289	171	138	28	656	10
22	34	94	63	52	67	2990	262	160	112	26	448	9.5
23	43	115	74	53	62	3560	247	156	98	24	362	8.8
24	40	138	69	54	57	2080	250	145	86	25	245	8.2
25	39	132	71	55	62	1070	365	136	79	24	178	7.6
26	37	123	66	56	66	811	2530	131	73	23	136	7.0
27	40	126	68	56	62	701	1190	132	69	21	114	6.5
28	36	111	60	56	59	695	975	120	67	19	99	6.2
29	35	97	55	56	---	1810	827	111	64	18	85	6.5
30	34	89	58	56	---	3190	827	106	63	20	77	6.8
31	32	---	57	56	---	1880	---	103	---	18	72	---
TOTAL	1307	2182	2442	1616	1564	44624	20002	9248	4273	1357	5212	638.1
MEAN	42.2	72.7	78.8	52.1	55.9	1439	667	298	142	43.8	168	21.3
MAX	65	160	130	56	67	6550	2530	846	340	137	1140	61
MIN	32	30	55	48	50	60	247	103	63	18	17	6.2
CFSM	.22	.37	.40	.27	.29	7.34	3.40	1.52	.72	.22	.86	.11
IN.	.25	.41	.46	.31	.30	8.47	3.80	1.76	.81	.26	.99	.12

CAL YR 1978 TOTAL 58071.0 MEAN 159 MAX 6030 MIN 4.8 CFSM .81 IN 11.02
WTR YR 1979 TOTAL 94465.1 MEAN 259 MAX 6550 MIN 6.2 CFSM 1.32 IN 17.93

05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY (MG/L AS CACO3) (00435)
OCT												
18...	1100	17002	17002	--	35	750	8.6	14.5	9.0	--	20	--
26...	0830	80010	--	--	36	--	--	3.0	9.5	--	--	--
NOV												
13...	1300	17002	17002	--	39	725	8.2	15.5	9.0	--	16	--
DEC												
04...	1300	17002	17002	--	79	900	8.7	-4.5	1.0	--	12	--
11...	1040	80010	--	--	91	--	--	-1.0	.0	--	--	--
JAN												
11...	1330	80010	--	--	52	--	--	--	--	--	--	--
31...	1400	17002	17002	56	--	980	9.1	-11.0	--	--	4	--
FEB												
26...	1555	80010	--	--	66	--	--	.0	.0	--	--	--
MAR												
05...	1300	17002	17002	--	760	760	8.2	1.0	1.0	--	74	--
06...	1600	80010	--	--	894	--	--	5.5	.5	--	--	--
19...	1145	80010	--	--	4820	--	--	16.0	4.5	--	--	--
20...	1205	80010	--	--	6940	--	--	10.0	2.0	--	--	--
APR												
09...	1100	17002	17002	--	419	700	8.1	1.0	4.5	--	4	.0
12...	1410	80010	--	--	1410	--	--	19.0	11.0	--	--	--
MAY												
02...	1100	17002	17002	--	570	665	8.2	15.5	11.0	11.1	8	.0
23...	0900	17002	17002	--	158	660	8.3	18.5	16.5	--	12	.0
23...	1000	17002	17002	--	158	630	8.4	18.5	16.5	--	8	.0
23...	1620	80010	--	--	154	--	--	18.0	20.0	--	--	--
JUN												
20...	1300	17002	17002	--	196	435	8.0	29.5	25.0	--	140	.0
JUL												
05...	1400	80010	--	--	111	--	--	21.5	21.0	--	--	--
18...	1300	17002	17002	--	30	650	8.5	26.5	23.0	--	20	.0
AUG												
20...	0900	17002	17002	--	1000	340	7.7	24.0	21.0	--	56	.0
22...	1100	17002	17002	--	452	640	7.4	24.0	22.0	--	16	.0
SEP												
19...	0800	17002	17002	--	12	700	7.9	17.0	16.0	--	16	.0
19...	0900	17002	17002	--	12	700	8.1	17.0	16.0	--	12	.0

05556500 BIG BUREAU CREEK AT PRINCETON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT												
18...	--	--	12	3	.30	.02	0	400	20	--	.0	--
NOV												
13...	--	--	14	12	4.4	.58	0	600	0	--	.0	--
DEC												
04...	--	--	12	2	8.4	1.3	0	400	0	--	.0	--
JAN												
31...	--	--	5	--	8.2	1.4	0	100	0	--	.0	--
MAR												
05...	--	--	530	82	10	.49	10	7400	120	--	.0	--
APR												
09...	220	50	56	14	12	.06	0	900	0	50	.0	(
MAY												
02...	200	53	60	3	12	.12	0	900	0	80	.0	0
23...	208	53	11	5	5.4	.02	0	200	0	20	.0	0
23...	208	52	15	9	5.8	.10	0	200	0	20	.0	0
JUN												
20...	140	32	1500	220	7.8	.26	20	17500	0	1000	.0	100
JUL												
18...	240	53	55	10	6.8	.04	10	700	0	60	.0	0
AUG												
20...	122	23	720	85	2.8	.15	30	12300	0	580	.0	100
22...	220	45	350	45	10	.20	20	4300	0	290	.0	0
SEP												
19...	240	57	80	12	3.5	.57	0	100	0	80	.0	0
19...	240	58	44	8	4.7	.59	0	800	0	70	.0	0

05557000 WEST BUREAU CREEK AT WYANET, IL

LOCATION.--Lat 41°21'54", long 89°34'08", in NE¼NE¼ sec.21, T.16 N., R.8 E., Bureau County, Hydrologic Unit 07130001, at bridge on U.S. Highways 6 and 34, 0.5 mi (0.8 km) east of Wyanet, 8.7 mi (14.0 km) downstream from Lime Creek, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--86.7 mi^2 (224.6 km^2).

PERIOD OF RECORD.--July to September 1979. Additional chemical data for water years 1972, 1974-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DQD 01.

WATER QUALITY DATA, JULY TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
JUL											
23...	0800	17002	17002	660	7.4	25.5	23.0	0	.0	240	64
SEP											
05...	0900	17002	17002	740	8.2	20.0	20.0	8	.0	280	65
05...	1000	17002	17002	720	8.2	20.0	20.0	12	.0	280	63

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
JUL										
23...	10	6	8.0	.10	--	--	--	--	--	--
SEP										
05...	1	--	6.6	.02	0	200	0	--	.0	0
05...	2	--	6.9	.02	0	100	0	50	.0	0

05558995 ILLINOIS RIVER AT LACON, IL

LOCATION.--Lat 41°01'30", long 89°25'02", in SE¼ sec.13, T.12 N., R.9 E., Marshall County, Hydrologic Unit 07130001, at bridge on State Highway 17 at west edge of Lacon, 2.5 mi (4.0 km) downstream from Crow Creek and at mile 189.2 (304.4 km).

DRAINAGE AREA.--12,953 mi^2 (33,548 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1960-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 09.

REMARKS.--Water-discharge records from Illinois River at Marseilles (station 05543500) and Illinois River at Kingston Mines (station 05568500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV											
01...	0900	17002	17002	5900	765	8.3	14.5	12.0	--	24	--
27...	0900	17002	17002	7250	910	8.3	2.0	3.5	--	20	<100
DEC											
20...	1100	17002	17002	6220	1260	--	2.0	1.5	--	24	--
FEB											
07...	1200	17002	17002	5360	1320	8.6	-8.5	.0	--	35	--
MAR											
26...	1200	17002	17002	48100	490	7.9	2.0	4.5	--	24	<100
APR											
26...	1000	17002	17002	41200	632	8.1	10.5	14.5	9.5	22	<10
MAY											
24...	1000	17002	17002	12200	632	8.1	15.5	18.0	7.3	32	K10
24...	1100	17002	17002	12200	698	8.1	15.5	18.0	7.2	30	K40
JUN											
14...	1000	17002	17002	14700	710	7.8	24.5	24.5	5.0	29	K500
AUG											
02...	1300	17002	17002	10400	665	7.8	29.5	27.0	4.5	25	50
28...	1100	17002	17002	16400	575	7.9	26.0	24.0	5.8	27	K300

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV										
01...	--	59	6	2.8	.55	0	800	0	.0	--
27...	--	36	12	3.2	1.7	0	1100	10	.0	--
DEC										
20...	--	21	2	3.4	2.2	0	1000	20	.0	--
FEB										
07...	--	1	--	2.9	2.9	10	300	10	.0	--
MAR										
26...	--	46	8	6.4	.52	0	1000	10	.0	--
APR										
26...	38	57	5	7.7	.40	10	1300	0	.0	--
MAY										
24...	--	168	20	4.9	.20	30	1400	100	.0	--
24...	--	138	0	5.1	.20	0	5000	0	.0	--
JUN										
14...	--	130	16	4.4	.60	20	2500	0	.0	--
AUG										
02...	--	73	8	3.4	.30	20	1600	0	.0	0
28...	--	158	18	3.1	.10	10	3400	50	.0	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL

LOCATION.--Lat 40°43'30", long 89°32'58", in SE¼ sec.26, T.9 N., R.8 E., Peoria County, Hydrologic Unit 07130001, at the city of Peoria water intake, 3.0 mi (4.8 km) upstream from Farm Creek and at mile 166.1 (267.3 km).

DRAINAGE AREA.--13,900 mi^2 (36,000 km^2), approximately.

PERIOD OF RECORD.--Water years 1970-72, 1978 to current year.

REMARKS.--Water-discharge records from Illinois River at Marseilles (station 05543500) and Illinois River at Kingston Mines (station 05568500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
NOV											
02...	1300	17002	17002	6240	773	8.5	24.5	13.5	12.4	29	K10
30...	1000	17002	17002	7010	858	8.3	-4.0	.5	12.9	27	K20
DEC											
28...	1100	17002	17002	6460	1090	8.2	-2.0	.0	13.2	21	K30
JAN											
23...	1500	17002	17002	6260	1122	7.9	-1.5	.5	--	17	--
FEB											
21...	1000	17002	17002	5710	1300	--	3.0	-13.5	--	20	--
MAR											
15...	1000	17002	17002	55400	530	7.7	-4.0	.5	12.5	24	150
APR											
19...	1100	17002	17002	47900	500	8.0	19.0	13.0	9.1	18	<10
MAY											
17...	1100	17002	17002	30700	640	8.1	25.5	20.0	7.6	23	K40
17...	1200	17002	17002	30700	604	8.1	25.5	20.0	7.4	21	K80
JUN											
12...	1100	17002	17002	16700	790	7.9	24.5	23.5	5.3	28	200
JUL											
10...	1200	17002	17002	12200	690	8.0	32.0	26.5	6.9	26	K600
AUG											
09...	1300	17002	17002	15100	628	8.2	34.5	30.5	8.1	26	10
SEP											
10...	1400	17002	17002	5660	720	8.5	33.5	25.5	--	43	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05559900 ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	RHOS-RHORUS, TOTAL (MG/L AS P) (00665)
NOV										
02...	100	66	73	2	3.0	.00	1.8	1.8	4.8	.40
30...	102	858	69	10	3.0	1.9	--	--	--	.53
DEC										
28...	113	116	63	3	3.4	1.5	1.4	2.9	6.3	.41
JAN										
23...	113	118	20	1	4.2	1.9	.60	2.5	6.7	.44
FEB										
21...	117	116	19	4	3.0	3.0	1.4	4.4	7.4	.64
MAR										
15...	49	39	89	14	4.0	.60	1.2	1.8	5.8	.32
APR										
19...	60	32	27	3	5.3	.60	.50	1.1	6.4	.30
MAY										
17...	76	36	102	18	5.8	.20	.90	1.1	6.9	.31
17...	78	37	16	10	6.2	.20	.80	1.0	7.2	.30
JUN										
12...	106	71	121	12	4.1	.50	1.4	1.9	6.0	.44
JUL										
10...	81	52	66	15	3.4	.20	1.2	1.4	4.8	.37
AUG										
09...	73	52	73	16	2.5	.00	--	--	--	.40
SER										
10...	82	53	78	19	2.2	.00	--	--	--	.46

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
NOV										
02...	3	0	0	10	1460	0	--	.0	30	0
30...	1	0	0	0	1340	0	--	.0	50	0
DEC										
28...	1	0	10	20	1710	0	--	.0	--	0
JAN										
23...	0	0	0	0	500	0	100	.0	0	0
FEB										
21...	0	0	0	0	430	0	--	.0	--	6
MAR										
15...	3	0	0	0	1900	0	--	.0	--	0
APR										
19...	0	0	0	10	1100	0	--	.0	--	0
MAY										
17...	4	0	10	0	1800	0	--	.0	--	0
17...	4	0	10	0	1600	0	--	.0	--	0
JUN										
12...	0	0	0	10	2900	0	--	.1	--	0
JUL										
10...	3	0	0	0	1400	0	--	.0	--	0
AUG										
09...	4	0	320	20	740	0	--	.0	0	0
SEP										
10...	4	0	30	10	1500	0	--	.0	30	0

05560500 FARM CREEK AT FARMDALE, IL

LOCATION.--Lat 40°40'00", long 89°30'15", in NE¼SE¼ sec.36, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank 200 ft (61 m) downstream from bridge, 0.2 mi (0.3 km) southeast of Farmdale, 0.2 mi (0.3 km) upstream from Lake Erie & Western Railroad bridge, 0.3 mi (0.5 km) downstream from Toledo, Peoria & Western Railroad bridge, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--27.4 mi^2 (71.0 km^2).

PERIOD OF RECORD.--October 1948 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 530.12 ft (161.581 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. High flow regulated by Farmdale Dam, 1 mi (2 km) upstream beginning in September 1950. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 18.2 ft^3/s (0.515 m^3/s), 9.02 in/yr (229 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 7.58 ft (2.310 m) Apr. 24, 1950, discharge not determined; no flow for several days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 753 ft^3/s (21.3 m^3/s) Mar. 4, gage height, 4.04 ft (1.231 m); no flow July 19-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.2	2.4	35	.50	10	69	43	3.6	2.4	1.8	2.8
2	2.0	2.0	2.4	10	.50	20	67	54	3.2	2.0	1.8	2.0
3	7.4	2.7	6.2	4.0	.50	291	55	227	2.8	6.2	1.8	1.4
4	1.8	2.4	4.1	1.5	.50	704	52	71	2.4	2.4	2.0	1.5
5	1.2	2.5	2.4	1.0	.50	579	47	52	2.0	1.8	1.8	1.4
6	1.2	5.4	2.4	.80	.50	169	38	41	2.0	1.6	1.6	1.4
7	.81	4.1	3.2	.60	.50	186	37	34	2.4	1.4	1.2	1.4
8	1.0	2.7	4.6	.60	.50	122	37	28	16	1.0	1.0	1.4
9	.81	2.5	7.0	.50	.60	98	33	24	23	.81	1.4	1.3
10	.81	2.4	3.0	.50	.60	56	30	22	15	.81	4.6	1.2
11	1.0	2.2	1.5	.50	.60	43	133	32	12	.61	3.2	1.0
12	1.0	2.3	1.5	.50	.50	34	492	22	7.4	.21	1.4	1.0
13	1.4	2.9	1.5	.50	.50	183	101	22	8.1	.61	1.0	.90
14	1.8	2.9	1.5	.50	.40	103	81	20	5.6	16	1.0	.90
15	1.8	2.5	1.0	.50	.40	58	61	18	5.6	10	.61	.90
16	1.8	2.6	1.0	.50	.40	56	50	15	8.1	6.8	.61	.90
17	1.4	12	1.0	.50	.50	60	42	14	5.1	4.6	1.1	.90
18	1.2	3.9	1.0	.50	.50	100	38	12	5.6	1.6	13	.90
19	1.0	2.3	1.0	.50	.60	422	36	12	4.6	.00	3.8	.80
20	1.0	2.0	1.5	.50	.60	126	33	10	3.6	.00	3.3	.70
21	.80	1.5	1.5	.50	2.0	88	32	9.4	2.8	.00	6.6	.60
22	.80	2.0	1.0	.50	10	72	29	8.1	2.4	.00	19	.60
23	3.0	8.9	1.0	.50	150	72	27	8.7	2.4	.00	19	.50
24	6.8	3.1	1.0	.50	100	93	27	7.4	2.8	.00	8.1	.50
25	9.4	2.7	1.5	.50	60	72	46	7.4	2.4	97	5.3	.50
26	6.6	3.0	2.0	.60	100	61	547	8.7	2.4	14	3.8	.50
27	2.7	4.2	2.0	.80	65	56	390	8.1	2.8	4.6	3.2	.60
28	2.0	3.7	2.0	1.0	15	109	85	5.1	2.8	3.6	2.9	.80
29	2.3	3.2	5.0	.80	---	111	67	4.6	3.2	2.8	2.6	.70
30	1.8	3.5	37	.80	---	124	55	4.1	3.2	2.4	2.4	.50
31	1.5	---	18	.60	---	92	---	4.1	---	2.0	2.4	---
TOTAL	70.13	99.3	122.2	66.60	512.20	4370	2837	848.7	165.3	187.25	123.32	30.50
MEAN	2.26	3.31	3.94	2.15	18.3	141	94.6	27.4	5.51	6.04	3.98	1.02
MAX	9.4	12	37	35	150	704	547	227	23	97	19	2.8
MIN	.80	1.2	1.0	.50	.40	10	27	4.1	2.0	.00	.61	.50
CFSM	.08	.12	.14	.08	.67	5.15	3.45	1.00	.20	.22	.15	.04
IN.	.10	.13	.17	.09	.70	5.93	3.85	1.15	.22	.25	.17	.04

CAL YR 1978 TOTAL 6257.97 MEAN 17.1 MAX 279 MIN .80 CFSM .62 IN 8.50
WTR YR 1979 TOTAL 9432.50 MEAN 25.8 MAX 704 MIN .00 CFSM .94 IN 12.81

05561000 ACKERMAN CREEK AT FARMDALE, IL

LOCATION.--Lat 40°39'43", long 89°30'13", in SE¼SE¼ sec.36, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on right bank at upstream side of New York, Chicago and St. Louis Railroad bridge, 0.45 mi (0.72 km) southeast of Farmdale and at mile 0.3 (0.5 km).

DRAINAGE AREA.--11.2 mi^2 (29.0 km^2).

PERIOD OF RECORD.--December 1953 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.22 ft (160.697 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for periods of no gage-height record, Jan. 10 to Mar. 2 and May 12 to June 25, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--25 years (water years 1955-79), 6.29 ft^3/s (0.178 m^3/s) 7.63 in/yr (194 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft^3/s (52.7 m^3/s) June 25, 1968, gage height, 9.15 ft (2.789 m), from rating curve extended above 60 ft^3/s (1.70 m^3/s); maximum gage height, 10.66 ft (3.249 m) Sept. 14, 1972; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 3	2245	499	14.1	6.63	2.021	Apr. 26	0030	*1020	28.9	*8.91	2.716
Mar. 19	0300	343	9.71	5.82	1.774	May 2	2315	364	10.3	5.94	1.811
Apr. 11	2145	672	19.0	7.43	2.265	July 25	0330	590	16.7	6.89	2.100

No flow July 5-10, 18-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.82	1.2	.80	.10	6.0	29	25	.60	.23	1.1	.43
2	.56	.82	.98	.60	.10	10	27	50	.40	.29	.42	.33
3	3.9	.98	.56	.50	.10	169	20	93	.30	7.2	.68	.34
4	.46	.82	1.4	.40	.10	193	19	39	.20	.46	.46	.36
5	.37	.56	.98	.40	.10	63	16	24	.20	.00	.37	.42
6	.37	.98	.68	.40	.10	40	11	16	.20	.00	.68	.39
7	.37	.98	.46	.40	.10	20	12	11	.50	.00	.46	.37
8	.29	.98	.60	.40	.10	10	13	5.8	3.0	.00	.41	.37
9	.23	.98	.80	.40	.20	10	9.4	3.5	5.0	.00	.54	.37
10	.23	1.2	.60	.40	.20	9.0	6.2	2.5	4.0	.00	.72	.46
11	.29	1.6	.40	.20	.20	8.3	122	12	3.0	.04	.61	.46
12	.29	.98	.40	.20	.10	15	100	2.5	2.5	.10	.52	.37
13	.46	1.2	.40	.10	.10	60	55	2.0	2.0	.10	.55	.37
14	.82	1.2	.40	.10	.10	38	41	1.5	2.0	6.4	.54	.37
15	.46	1.4	.20	.10	.10	26	29	1.5	1.5	.37	.49	.29
16	.56	.98	.20	.10	.10	25	23	3.0	2.5	.23	.43	.29
17	.46	11	.20	.10	.10	28	19	5.0	2.0	.06	.51	.37
18	.46	1.4	.20	.10	.10	55	16	3.5	1.5	.00	.63	.37
19	.46	1.9	.20	.10	.10	137	14	2.5	1.0	.00	.51	.23
20	.56	1.4	.40	.10	.10	46	14	2.0	.80	.00	3.4	.23
21	.56	.98	.40	.10	2.0	33	12	1.5	.60	.00	3.2	.18
22	.56	.98	.20	.10	5.0	25	9.2	1.0	.40	.00	4.0	.18
23	.82	4.4	.20	.10	50	25	8.1	.80	.30	.00	.90	.14
24	.98	1.2	.20	.10	30	35	9.4	.50	.40	.00	.39	.18
25	2.2	.98	.20	.10	15	25	59	1.0	.40	83	.36	.14
26	1.4	.98	.20	.10	30	20	254	3.0	.37	3.4	.36	.14
27	.82	1.9	.20	.20	20	17	75	2.0	.26	.68	.49	.14
28	.82	1.4	.20	.50	9.6	34	54	1.5	.29	.82	.38	.23
29	.82	1.2	1.9	.40	---	46	42	1.0	.37	.46	.37	.18
30	.98	.98	13	.30	---	47	31	.80	.29	.56	.37	.14
31	.82	---	1.4	.20	---	37	---	.80	---	.56	.42	---
TOTAL	22.94	47.18	29.36	8.10	163.90	1312.3	1149.3	319.20	36.88	104.96	25.27	8.84
MEAN	.74	1.57	.95	.26	5.85	42.3	38.3	10.3	1.23	3.39	.82	.29
MAX	3.9	11	13	.80	50	193	254	93	5.0	83	4.0	.46
MIN	.23	.56	.20	.10	.10	6.0	6.2	.50	.20	.00	.36	.14
CFSM	.07	.14	.09	.02	.52	3.78	3.42	.92	.11	.30	.07	.03
IN.	.08	.16	.10	.03	.54	4.36	3.82	1.06	.12	.35	.08	.03

CAL YR 1978 TOTAL 2874.16 MEAN 7.87 MAX 307 MIN .10 CFSM .70 IN 9.55
WTR YR 1979 TOTAL 3228.23 MEAN 8.84 MAX 254 MIN .00 CFSM .79 IN 10.72

05561500 FONDULAC CREEK NEAR EAST PEORIA, IL

LOCATION.--Lat 40°40'38", long 89°31'52", on line between SW¼ and SE¼ sec.26, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank at upstream side of bridge on State Highway 8, 0.2 mi (0.3 km) upstream from New York, Chicago and St. Louis Railroad bridge, 3 mi (5 km) northeast of East Peoria, and at mile 0.4 (0.6 km).

DRAINAGE AREA.--5.54 mi^2 (14.35 km^2).

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 505.00 ft (153.924 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Aug. 5, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. High flow regulated by Fondulac Dam, 0.5 mi (0.8 km) upstream. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--31 years, 4.28 ft^3/s (0.121 m^3/s), 10.49 in/yr (266 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft^3/s (15.9 m^3/s) Mar. 3, 1979, gage height, 4.66 ft (1.420 m), from rating curve extended above 160 ft^3/s (4.53 m^3/s); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 560 ft^3/s (15.9 m^3/s) Mar. 3, gage height, 4.66 ft (1.420 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.00	.63	6.0	.10	10	9.5	5.3	.07	.00	.04	.00
2	.22	.00	.43	3.0	.10	30	10	12	.05	.00	.17	.00
3	3.1	.00	7.7	1.0	.10	200	6.9	23	.02	.98	.01	.00
4	.07	.00	1.2	.50	.10	142	6.9	8.1	.01	.04	.00	.00
5	.02	.00	.86	.50	.10	27	6.0	5.7	.01	.00	.00	.00
6	.00	1.4	.28	.40	.10	32	4.3	4.6	.01	.00	.00	.00
7	.00	.22	.35	.30	.10	27	4.3	3.4	.17	.00	.00	.00
8	.00	.10	.52	.30	.10	19	4.3	2.6	3.4	.00	.00	.00
9	.00	.13	1.1	.30	.10	16	3.7	1.9	.75	.00	.00	.00
10	.00	.13	.50	.30	.10	10	3.1	1.7	.35	.00	.02	.00
11	.01	.04	.30	.20	.10	8.6	51	4.6	.28	.00	.00	.00
12	.01	.02	.30	.20	.10	8.6	85	2.1	.13	.00	.00	.00
13	.02	.13	.30	.20	.10	30	13	2.6	.63	.00	.00	.00
14	.02	.07	.30	.20	.10	16	8.1	1.9	.13	.00	.00	.00
15	.00	.02	.30	.20	.10	11	6.0	1.6	.04	.00	.00	.00
16	.00	.13	.30	.20	.10	12	5.0	1.1	.00	.00	.00	.00
17	.00	7.7	.20	.20	.10	11	4.0	.86	.00	.00	.00	.00
18	.00	.75	.20	.20	.20	21	3.4	.86	.01	.00	.52	.00
19	.00	.28	.30	.20	.20	73	3.1	.63	.02	.00	.00	.00
20	.00	.17	.50	.20	.20	16	2.8	.43	.00	.00	.63	.00
21	.00	.17	.40	.20	10	10	2.8	.52	.00	.00	.07	.00
22	.00	.28	.30	.20	30	7.7	2.4	.28	.00	.00	.10	.00
23	.28	5.0	.20	.20	50	8.1	2.1	.35	.00	.00	4.1	.00
24	.05	.63	.30	.20	30	14	3.1	.28	.00	.00	.16	.00
25	1.2	.35	.40	.20	20	8.1	14	.28	.00	30	.02	.00
26	.75	.63	.40	.30	30	6.9	124	1.4	.00	7.7	.00	.00
27	.13	2.1	.50	.40	10	6.4	24	.52	.00	1.2	.00	.00
28	.02	.98	.50	.40	4.5	21	10	.22	.00	.05	.00	.00
29	.10	.52	4.0	.30	---	27	10	.13	.00	.01	.00	.00
30	.04	.52	12	.30	---	20	6.4	.10	.00	.01	.00	.00
31	.00	---	10	.20	---	13	---	.10	---	.00	.00	---
TOTAL	6.09	22.47	45.57	17.50	186.80	862.4	439.2	89.16	6.08	39.99	5.84	.00
MEAN	.20	.75	1.47	.56	6.67	27.8	14.6	2.88	.20	1.29	.19	.000
MAX	3.1	7.7	12	6.0	50	200	124	23	3.4	30	4.1	.00
MIN	.00	.00	.20	.20	.10	6.4	2.1	.10	.00	.00	.00	.00
CFSM	.04	.14	.27	.10	1.20	5.02	2.64	.52	.04	.23	.03	.000
IN.	.04	.15	.31	.12	1.25	5.79	2.95	.60	.04	.27	.04	.00

CAL YR 1978 TOTAL 1318.19 MEAN 3.61 MAX 152 MIN .00 CFSM .65 IN 8.85
WTR YR 1979 TOTAL 1721.10 MEAN 4.72 MAX 200 MIN .00 CFSM .85 IN 11.55

05562000 FARM CREEK AT EAST PEORIA, IL

LOCATION.--Lat 40°40'04", long 89°34'40", in SW¼NW¼ sec.33, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on left bank 30 ft (9 m) upstream from Main Street Bridge in East Peoria, 300 ft (91 m) downstream from Coal Creek, 400 ft (122 m) upstream from Peoria and Pekin Union Railway bridge, 1,300 ft (396 m) upstream from entrance to Farm Creek diversion channel, and at mile 1.4 (2.3 km).

DRAINAGE AREA.--61.2 mi^2 (158.5 km^2).

PERIOD OF RECORD.--May 1943 to current year.

REVISED RECORDS.--WSP 1508: 1945, 1956(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 450.39 ft (137.279 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to July 31, 1945, nonrecording gage at site 400 ft (122 m) downstream at same datum. July 31, 1945, to Sept. 2, 1948, nonrecording gage at site 30 ft (9 m) downstream at same datum.

REMARKS.--Records poor. High flow regulated by Farmdale and Fondulac Dams beginning in September 1950. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--36 years, 43.8 ft^3/s (1.240 m^3/s), 9.72 in/yr (247 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft^3/s (623 m^3/s) Apr. 29, 1947, gage height, 15.00 ft (4.572 m), from rating curve extended above 4,200 ft^3/s (119 m^3/s) on basis of velocity-area studies and slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of about 15.6 ft (4.75 m), present site, occurred in 1927, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,390 ft^3/s (67.7 m^3/s) Apr. 26, gage height, 4.71 ft (1.436 m); maximum gage height, 5.13 ft (1.564 m) Mar. 23, backwater from Illinois River; minimum daily discharge, 1.2 ft^3/s (0.034 m^3/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	5.0	5.4	60	1.5	25	150	97	6.0	4.5	5.2	4.0
2	14	4.8	5.4	30	1.5	100	120	127	4.8	4.0	4.4	3.5
3	21	5.6	46	15	1.5	756	100	447	4.3	10	3.8	3.0
4	3.2	6.0	20	6.0	1.5	1480	90	184	4.3	7.0	3.4	2.5
5	4.6	6.0	10	10	1.5	703	80	130	4.3	5.0	3.1	2.2
6	2.9	44	6.7	5.0	1.5	300	70	106	3.8	4.0	2.8	2.0
7	2.8	15	6.8	3.0	1.5	412	65	87	9.2	3.5	2.3	2.0
8	2.7	8.1	18	3.0	1.5	250	60	67	32	3.0	2.2	2.0
9	2.5	7.0	30	3.0	2.0	170	55	48	100	2.5	2.1	2.0
10	3.0	7.5	15	2.5	2.0	130	50	46	43	2.2	3.7	2.0
11	6.0	7.5	6.0	2.5	2.0	100	300	75	23	2.0	13	2.0
12	3.2	7.3	4.0	2.5	2.0	80	1000	46	18	2.0	3.1	2.0
13	15	22	3.5	2.5	1.5	400	400	41	32	3.0	2.0	1.5
14	9.9	11	3.0	2.5	1.5	250	200	38	16	40	1.7	1.5
15	2.9	8.7	3.0	2.5	1.5	200	130	35	10	20	1.7	1.5
16	2.5	16	2.5	2.0	1.5	150	90	29	8.3	10	1.6	1.5
17	2.4	100	2.5	2.0	1.5	150	80	24	7.5	7.0	1.6	1.5
18	2.7	54	2.5	2.0	1.5	250	70	23	7.5	5.0	32	1.5
19	3.0	32	2.5	2.0	1.5	1000	60	21	7.5	3.9	11	1.2
20	2.8	23	3.0	1.9	2.0	300	55	20	6.0	3.9	8.4	1.3
21	2.9	14	3.0	2.0	7.0	200	50	15	5.4	3.7	12	1.3
22	3.4	7.5	2.5	2.0	50	150	45	11	6.0	3.6	60	1.3
23	17	67	2.5	2.0	300	120	40	12	5.4	3.3	112	1.3
24	12	25	2.5	2.0	500	120	40	14	4.8	3.8	14	1.5
25	30	12	3.0	2.0	400	100	200	14	4.8	316	5.8	2.4
26	17	23	5.0	2.5	250	85	1580	21	4.5	94	4.1	2.0
27	5.9	72	5.0	2.5	150	80	731	23	4.5	42	4.2	2.5
28	4.6	25	5.0	2.5	30	300	196	11	4.5	17	3.6	3.0
29	4.5	11	20	2.5	---	500	143	8.3	5.0	11	3.5	3.6
30	4.3	8.3	80	2.0	---	300	124	7.5	5.0	9.0	3.3	3.6
31	4.3	---	40	2.0	---	200	---	6.7	---	6.6	3.0	---
TOTAL	215.6	655.3	364.3	183.9	1719.5	9361	6374	1834.5	397.4	652.5	334.6	63.2
MEAN	6.95	21.8	11.8	5.93	61.4	302	212	59.2	13.2	21.0	10.8	2.11
MAX	30	100	80	60	500	1480	1580	447	100	316	112	4.0
MIN	2.4	4.8	2.5	1.9	1.5	25	40	6.7	3.8	2.0	1.6	1.2
CFSM	.11	.36	.19	.10	1.00	4.94	3.46	.97	.22	.34	.18	.03
IN.	.13	.40	.22	.11	1.05	5.69	3.87	1.12	.24	.40	.20	.04

CAL YR 1978 TOTAL 19315.9 MEAN 52.9 MAX 1700 MIN 1.4 CFSM .86 IN 11.74
WTR YR 1979 TOTAL 22155.8 MEAN 60.7 MAX 1580 MIN 1.2 CFSM .99 IN 13.47

05562010 FARM CREEK AT CAMP STREET BRIDGE AT EAST PEORIA, IL

)CATION.--Lat 40°40'16", long 89°34'48", in SW¼NW¼ sec.33, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, at bridge on State Highway 116, 0.2 mi (0.3 km) downstream from Coal Creek and at mile 1.4 (2.3 km).

RAINAGE AREA.--61.3 mi² (158.8 km²).

PERIOD OF RECORD.--April to September 1979.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
APR												
30...	1000	17002	17002	100	682	8.2	13.5	10.0	--	12	--	71
30...	1100	17002	17002	100	700	8.2	13.5	10.0	--	11	--	70
MAY												
29...	1100	17002	17002	8.3	--	9.1	28.5	--	10.3	11	260	84
JUN												
19...	1000	17002	17002	7.5	900	8.5	29.0	21.0	11.6	12	K1000	78
AUG												
01...	1100	17002	17002	5.2	840	8.3	20.5	20.5	--	6	--	100
SEP												
11...	1300	17002	17002	2.0	680	8.7	31.5	28.5	--	10	--	105

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR											
30...	39	66	0	7.7	.20	10	1600	200	--	--	0
30...	38	69	0	7.8	.20	10	2000	0	--	--	0
MAY											
29...	70	12	2	4.7	.00	10	350	0	.0	--	0
JUN											
19...	83	115	2	4.2	.00	10	2100	0	.1	--	0
AUG											
01...	64	19	2	1.2	.00	0	300	0	.0	0	0
SEP											
11...	60	8	4	.20	.00	10	0	0	.0	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05563525 KICKAPOO CREEK AT BARTONVILLE, IL

LOCATION.--Lat 40°39'18", long 89°38'52", in SE¼SW¼ sec.24, T.8 N., R.7 E., Peoria County, Hydrologic Unit 07130003, at bridge on U.S. Highway 24 at east edge of Bartonville, 3.8 mi (6.1 km) downstream from Dry Run and at mile 2.0 (3.2 km).

DRAINAGE AREA.--304 mi^2 (787 km^2).

PERIOD OF RECORD.--April to September 1979. Additional chemical data for water years 1959, 1961-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DL 01.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
APR												
30...	1400	17002	17002	732	8.2	13.0	11.0	--	11	--	.0	245
30...	1500	17002	17002	712	8.2	13.0	11.0	--	11	--	.0	245
MAY												
29...	1000	17002	17002	740	8.3	27.0	20.0	8.6	17	290	.0	264
JUN												
20...	1400	17002	17002	790	8.4	32.0	21.0	--	36	--	.0	254
JUL												
12...	1100	17002	17002	848	8.2	34.0	27.0	--	18	--	.0	230
AUG												
16...	1400	17002	17002	920	8.3	28.0	24.5	--	11	--	.0	250
SEP												
25...	1000	17002	17002	110	7.5	16.5	16.5	--	10	--	.0	274

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR												
30...	108	56	1	5.5	.00	10	1500	0	150	--	20	0
30...	109	67	2	5.5	.00	10	1300	0	100	--	10	0
MAY												
29...	152	214	18	4.0	.00	10	3300	0	290	.0	10	0
JUN												
20...	146	424	28	4.8	.00	20	7300	0	480	.0	50	--
JUL												
12...	163	83	16	1.2	.00	0	1200	0	140	.0	0	--
AUG												
16...	210	41	0	.20	.00	10	790	0	190	.0	0	--
SEP												
25...	275	48	5	.10	.00	0	1000	0	520	.0	0	--

05563800 ILLINOIS RIVER AT PEKIN, IL

LOCATION.--Lat 40°34'23", long 89°39'17", in SW¼ sec.24, T.7 N., R.7 E., Tazewell County, Hydrologic Unit 07130003, at State Highway 9 bridge at Pekin, 5.1 mi (8.2 km) upstream from Mackinaw River and at mile 152.9 (246.0 km).

DRAINAGE AREA.--14,585 mi^2 (37,775 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1960-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 05.

REMARKS.--Water-discharge records from Illinois River at Kingston Mines (station 05568500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
02...	1100	17002	17002	8290	625	8.1	18.5	19.0	--
NOV									
20...	1100	17002	17002	7000	800	8.1	-.5	6.0	--
DEC									
19...	1200	17002	17002	8850	1040	8.1	3.0	1.0	13.6
JAN									
23...	1200	17002	17002	6570	1160	8.0	-2.0	.5	10.7
MAY									
01...	1100	17002	17002	48500	618	8.2	11.0	11.0	8.5
31...	1000	17002	17002	15900	730	8.1	25.5	23.0	7.8
31...	1100	17002	17002	15900	650	8.1	25.5	23.0	7.8
JUN									
21...	1000	17002	17002	13400	710	8.0	29.0	15.5	5.8
JUL									
12...	1500	17002	17002	9800	670	8.1	31.5	29.0	--
AUG									
20...	1200	17002	17002	14200	610	8.1	34.5	26.0	--

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	ARSENIC TOTAL (UG/L AS AS) (01002)
OCT									
02...	28	--	67	46	64	6	2.8	.10	3
NOV									
20...	29	--	101	69	68	13	2.7	.80	1
DEC									
19...	25	--	105	125	90	11	3.4	2.3	0
JAN									
23...	20	--	116	142	30	1	3.9	2.2	3
MAY									
01...	20	1100	81	42	72	10	5.2	.40	1
31...	34	K1100	94	52	148	19	4.7	.20	0
31...	30	1500	93	51	179	22	4.7	.20	3
JUN									
21...	30	1300	82	52	162	26	4.7	.10	0
JUL									
12...	31	--	82	50	102	13	3.2	.00	2
AUG									
20...	30	--	68	50	110	18	2.2	.20	1

K Results based on colony count outside the acceptable range (non-ideal colony count).

05563800 ILLINOIS RIVER AT PEKIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
02...	0	0	0	1900	11	--	.0	--	0
NOV									
20...	0	0	0	1350	0	--	.0	--	0
DEC									
19...	0	10	20	2230	0	--	.0	--	0
JAN									
23...	0	10	0	800	0	120	.0	0	--
MAY									
01...	0	0	10	1600	0	--	.0	--	0
31...	0	0	10	2700	0	--	.1	--	0
31...	0	0	10	2600	0	--	.1	--	0
JUN									
21...	0	0	20	3200	0	--	.1	--	0
JUL									
12...	0	0	20	2300	0	--	.0	--	0
AUG									
20...	0	0	20	1200	0	--	.0	--	0

05564400 MONEY CREEK NEAR TOWANDA, IL

)CATION.--Lat 40°36'19", long 88°53'56", in SW¼SW¼ sec.20, T.25 N., R.3 E., McLean County, Hydrologic Unit 07130004, on right bank 25 ft (8 m) downstream from highway bridge, 3 mi (5 km) north of Towanda, 5 mi (8 km) east of Hudson, and at mile 8.3 (13.4 km).

RAINAGE AREA.--49.0 mi^2 (126.9 km^2).

ERIOD OF RECORD.--May 1958 to current year.

EVISED RECORDS.--WDR IL-75: Drainage area.

AGE.--Water-stage recorder and steel-sheet piling control. Datum of gage is 723.65 ft (220.569 m) National Geodetic Vertical Datum of 1929 (State Water Survey bench mark).

EMARKS.--Records poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

VERAGE DISCHARGE.--21 years, 33.5 ft^3/s (0.949 m^3/s), 9.28 in/yr (236 mm/yr).

XTREMES FOR PERIOD OF RECORD.--Maximum discharge 2,050 ft^3/s (58.1 m^3/s) Apr. 12, 1979, gage height, 10.66 ft (3.249 m), from floodmark; maximum gage height, 12.82 ft (3.908 m) Mar. 4, 1979, backwater from ice; no flow for many days in most years.

XTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
lar. 4	--	1540	43.6	*12.82	3.908	Apr. 12	1245	*2050	58.1	10.66	3.249

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.19	6.5	.23	40	92	60	14	5.0	20	1.7
2	.00	.00	.12	8.7	.22	70	85	50	13	4.5	25	1.6
3	.00	.00	.58	4.1	.21	200	70	120	13	5.5	10	1.4
4	.00	.00	1.6	1.2	.20	1100	60	100	12	11	7.0	1.0
5	.00	.00	.46	.44	.20	510	70	80	12	6.2	5.5	.72
6	.00	.00	.19	.29	.19	270	55	65	12	5.5	4.5	.46
7	.00	.00	.26	.20	.18	213	50	55	11	5.0	3.8	.20
8	.00	.00	.26	.14	.17	120	45	50	14	4.5	3.2	.10
9	.00	.00	.08	.13	.17	90	55	45	19	4.0	2.7	.05
10	.00	.00	.11	.12	.17	65	50	41	32	3.5	2.5	.02
11	.00	.00	.10	.13	.17	50	150	38	25	2.7	3.0	.00
12	.00	.00	.12	.14	.20	45	1100	35	20	2.4	2.0	.00
13	.00	.00	.12	.16	.25	60	383	38	16	2.2	1.6	.00
14	.00	.00	.08	.18	.30	110	150	33	14	5.5	1.1	.00
15	.00	.00	.12	.20	.35	70	90	30	12	8.0	.80	.00
16	.00	.00	.19	.22	.38	48	70	28	10	4.4	.58	.00
17	.00	.02	.26	.25	.35	45	60	27	9.0	3.5	.32	.00
18	.00	.00	.26	.30	.30	50	55	25	9.0	2.7	4.4	.00
19	.00	.08	.35	.35	.30	200	50	23	9.0	2.5	2.8	.00
20	.00	.12	.72	.50	.42	150	45	21	8.4	2.3	1.6	.00
21	.00	.04	1.0	.85	2.0	80	50	20	8.0	2.1	1.1	.00
22	.00	.04	.72	.70	10	50	47	19	7.3	2.0	1.2	.00
23	.00	.26	.35	.61	50	55	45	19	6.5	1.9	5.5	.00
24	.00	.72	.35	.50	150	60	70	18	6.0	2.5	23	.00
25	.00	1.2	.20	.44	100	55	123	17	5.7	20	14	.00
26	.00	.58	.10	.40	70	50	225	20	5.3	75	7.7	.00
27	.00	.35	.05	.35	40	50	150	18	4.6	40	4.7	.00
28	.00	.72	.03	.35	35	70	120	16	4.4	20	4.8	.00
29	.00	.35	1.6	.30	---	200	90	15	5.0	17	3.2	.00
30	.00	.19	23	.25	---	150	70	15	5.5	20	2.3	.00
31	.00	---	5.6	.25	---	120	---	14	---	17	2.2	---
TOTAL	.00	4.67	39.17	29.25	461.96	4446	3775	1155	342.7	308.4	172.10	7.25
MEAN	.000	.16	1.26	.94	16.5	143	126	37.3	11.4	9.95	5.55	.24
MAX	.00	1.2	23	8.7	150	1100	1100	120	32	75	25	1.7
MIN	.00	.00	.03	.12	.17	40	45	14	4.4	1.9	.32	.00
CFSM	.000	.003	.03	.02	.34	2.92	2.57	.76	.23	.20	.11	.005
IN.	.00	.00	.03	.02	.35	3.38	2.87	.88	.26	.23	.13	.01

CAL YR 1978 TOTAL 8869.27 MEAN 24.3 MAX 330 MIN .00 CFSM .50 IN 6.73
WTR YR 1979 TOTAL 10741.50 MEAN 29.4 MAX 1100 MIN .00 CFSM .60 IN 8.15

05566500 EAST BRANCH PANTHER CREEK AT EL PASO, IL

LOCATION.--Lat 40°45'15", long 89°00'20", at line between secs.32 and 33, T.27 N., R.2 E., Woodford County, Hydrologic Unit 07130004, on left bank at downstream side of highway bridge, 0.7 mi (1.1 km) upstream from Illinois Central Gulf Railroad bridge, 0.9 mi (1.4 km) north of El Paso, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 688.08 ft (209.727 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record Mar. 4 to Apr. 18, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--30 years, 19.0 ft^3/s (0.538 m^3/s), 8.46 in/yr (215 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s (150 m^3/s) July 9, 1951, gage height, 14.21 ft (4.331 m), from rating curve extended above 2,600 ft^3/s (73.6 m^3/s); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 2	0430	*2790	79.0	*12.37	3.770	Apr. 11	unknown	1000	28.3	unknown	
Mar. 19	unknown	500	14.2	unknown		June 7	1815	307	8.69	4.85	1.478

Minimum daily discharge, 0.20 ft^3/s (0.006 m^3/s) Feb. 6-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.39	.53	4.0	.30	600	20	62	7.0	2.8	2.1	.58
2	.39	.39	.53	5.0	.30	1590	17	53	7.0	2.4	2.0	.58
3	.58	.39	.81	2.0	.30	500	14	134	6.5	2.5	1.6	.53
4	.44	.39	.69	.50	.30	100	12	92	6.5	4.1	1.4	.48
5	.39	.39	.63	.50	.30	50	10	70	6.5	4.1	1.2	.39
6	.35	.53	.58	.30	.20	35	10	57	6.8	3.0	1.1	.63
7	.35	.48	.63	.30	.20	50	9.0	49	97	2.5	1.0	.58
8	.31	.44	.58	.30	.20	35	9.0	42	111	2.4	.94	.53
9	.31	.44	.50	.30	.20	25	8.0	36	56	2.5	1.0	.48
10	.35	.39	.50	.30	.20	20	8.0	34	33	2.3	1.0	.48
11	.39	.39	.40	.30	.20	15	700	31	21	2.1	.87	.48
12	.39	.39	.40	.30	.20	20	500	28	16	1.9	.81	.48
13	.44	.48	.40	.30	.20	70	200	26	15	1.9	.75	.53
14	.48	.44	.40	.30	.20	40	100	24	16	3.7	.69	.53
15	.44	.44	.40	.30	.20	25	70	23	13	4.3	.58	.48
16	.39	.39	.30	1.0	.20	20	50	21	11	3.0	.58	.48
17	.39	.69	.30	2.0	.20	15	40	18	9.8	2.4	.58	.48
18	.39	.53	.30	1.0	.20	30	40	17	8.8	2.1	3.0	.48
19	.39	.48	.30	.50	.20	200	34	16	8.5	1.9	5.8	.44
20	.39	.48	2.0	.40	.20	40	29	15	8.0	1.8	2.1	.53
21	.39	.44	5.0	.40	1.0	30	23	14	6.6	1.6	1.4	.58
22	.35	.44	3.0	.30	3.0	25	19	13	5.8	1.5	1.3	.48
23	.44	.69	2.0	.30	10	30	18	12	5.4	1.2	1.6	.48
24	.39	.53	1.0	.30	50	50	18	11	4.7	1.2	1.2	.48
25	.53	.53	.50	.30	40	35	36	10	4.3	42	.94	.48
26	.53	.53	.50	.30	30	25	188	10	4.1	41	.87	.48
27	.44	.63	.40	.30	20	20	145	9.0	3.9	11	.75	.44
28	.44	.69	.40	.30	50	100	126	9.0	3.7	5.6	.75	.44
29	.39	.53	.30	.30	---	50	102	8.0	3.9	3.7	.69	.44
30	.39	.48	15	.30	---	30	81	8.0	3.3	3.0	.63	.44
31	.39	---	4.0	.30	---	25	---	7.0	---	2.4	.63	---
TOTAL	12.68	14.43	43.28	23.30	208.50	3900	2636.0	959.0	510.1	167.9	39.86	14.91
MEAN	.41	.48	1.40	.75	7.45	126	87.9	30.9	17.0	5.42	1.29	.50
MAX	.58	.69	15	5.0	50	1590	700	134	111	42	5.8	.63
MIN	.31	.39	.30	.30	.20	15	8.0	7.0	3.3	1.2	.58	.39
CFSM	.01	.02	.05	.03	.24	4.13	2.88	1.01	.56	.18	.04	.02
IN.	.02	.02	.05	.03	.25	4.76	3.21	1.17	.62	.20	.05	.02

CAL YR 1978 TOTAL 5726.40 MEAN 15.7 MAX 193 MIN .12 CFSM .52 IN 6.98
WTR YR 1979 TOTAL 8529.96 MEAN 23.4 MAX 1590 MIN .20 CFSM .77 IN 10.40

05567500 MACKINAW RIVER NEAR CONGERVILLE, IL

LOCATION.--Lat 40°37'25", long 89°14'30", in NE¼SW¼ sec.17, T.25 N., R.1 W., Woodford County, Hydrologic Unit 07130004, on right bank at downstream side of bridge on U.S. Highway 150, 900 ft (274 m) downstream from New York, Chicago and St. Louis Railroad bridge, 0.2 mi (0.3 km) downstream from Walnut Creek, 2 mi (3 km) northwest of Congerville, and at mile 58.7 (94.4 km).

DRAINAGE AREA.--767 mi^2 (1,987 km^2).

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WSP 1175: 1948. WSP 1308: 1945(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 607.01 ft (185.017 m) National Geodetic Vertical Datum of 1929. Prior to July 11, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record Oct. 19 to Nov. 26, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--35 years, 487 ft^3/s (13.79 m^3/s), 8.62 in/yr (219 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft^3/s (1,020 m^3/s) July 9, 1951, gage height, 19.41 ft (5.916 m); minimum, 0.2 ft^3/s (0.006 m^3/s) Oct. 21-24, Oct. 27 to Nov. 3, 1956, Oct. 6, 1957, Oct. 8-10, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s (91 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	--	*18000	510	*18.35	5.593	Mar. 19	2215	4660	132	11.08	3.377
Mar. 14	1545	3550	101	9.47	2.886	Apr. 13	0315	10000	283	15.82	4.822

Minimum daily discharge, 4.6 ft^3/s (0.13 m^3/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.0	23	94	23	608	1500	1300	210	91	230	81
2	11	8.0	24	52	23	661	1380	1150	197	88	200	74
3	13	7.2	28	42	23	2300	1260	1680	193	88	204	67
4	11	7.3	28	33	22	11300	1120	2080	191	112	171	57
5	12	7.8	27	26	21	14300	1050	1650	187	161	141	52
6	12	8.1	24	21	20	7090	914	1360	180	212	118	48
7	9.8	9.3	22	21	21	6620	860	1160	197	146	121	44
8	9.0	11	23	20	22	6340	804	988	351	120	108	41
9	8.5	11	20	20	22	4920	747	838	408	105	98	38
10	9.1	9.8	19	20	22	2700	653	724	379	99	93	35
11	9.3	13	18	21	20	1510	1310	706	333	96	88	32
12	9.3	17	19	22	20	1150	6950	628	263	88	84	31
13	9.1	13	20	23	20	1800	9140	565	248	82	79	30
14	9.1	10	20	24	22	3530	5440	530	281	99	71	28
15	9.5	8.0	20	23	22	2420	2580	490	252	262	66	27
16	9.2	9.1	19	21	22	1490	1870	451	210	401	63	25
17	9.3	10	19	21	21	1560	1500	439	185	229	59	25
18	7.7	11	20	21	20	1680	1250	408	168	154	85	24
19	5.4	12	21	22	21	3950	1060	398	168	117	90	22
20	5.4	11	23	22	22	4110	932	379	168	115	114	22
21	5.2	11	24	21	22	2340	819	384	158	100	109	21
22	4.6	12	23	20	35	1780	725	319	134	89	151	20
23	5.3	15	23	20	252	1490	664	328	121	79	359	19
24	6.5	18	22	22	961	1520	656	309	115	74	702	19
25	7.9	23	21	20	1040	1620	784	286	106	927	496	19
26	9.5	24	21	21	779	1300	2020	274	100	1310	290	18
27	13	25	20	21	672	1090	2410	297	98	1740	197	17
28	13	21	20	21	607	1170	2010	279	95	1440	152	19
29	10	22	22	21	---	1730	1680	252	96	568	125	19
30	9.0	24	39	22	---	2040	1500	237	96	393	107	16
31	8.4	---	94	23	---	1760	---	233	---	293	91	---
TOTAL	281.1	396.6	766	801	4797	97879	55588	21122	5888	9878	5062	990
MEAN	9.07	13.2	24.7	25.8	171	3157	1853	681	196	319	163	33.0
MAX	13	25	94	94	1040	14300	9140	2080	408	1740	702	81
MIN	4.6	7.2	18	20	20	608	653	233	95	74	59	16
CFSM	.01	.02	.03	.03	.22	4.12	2.42	.89	.26	.42	.21	.04
IN.	.01	.02	.04	.04	.23	4.75	2.70	1.02	.29	.48	.25	.05

CAL YR 1978 TOTAL 137823.1 MEAN 378 MAX 4230 MIN 4.6 CFSM .49 IN 6.68
WTR YR 1979 TOTAL 203448.7 MEAN 557 MAX 14300 MIN 4.6 CFSM .73 IN 9.87

05567510 MACKINAW RIVER BELOW CONGERVILLE, IL

LOCATION.--Lat 40°35'12", long 89°16'42", in NW¼NE¼ sec.36, T.25 N., R.2 W., Tazewell County, Hydrologic Unit 07130004, at Rocky Ford bridge, 0.5 mi (0.8 km) upstream from Rock Creek, 0.8 mi (1.3 km) upstream from Hollands Creek, 4.5 mi (7.2 km) southwest of Congerville, and at mile 53.7 (86.4 km).

DRAINAGE AREA.--776 mi^2 (2,010 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water-discharge records from Mackinaw River near Congerville (station 05567500) were used to compute discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
OCT								
25...	1200	17002	17002	8.0	718	8.0	12.0	10.5
NOV								
15...	1400	17002	17002	8.1	788	8.1	3.0	6.5
DEC								
28...	1400	17002	17002	20	940	8.3	-1.0	.5
FEB								
01...	1400	17002	17002	23	950	8.0	-13.5	.0
APR								
10...	1300	17002	17002	654	610	8.3	10.0	6.5
MAY								
07...	1400	17002	17002	1140	670	7.8	29.0	16.5
07...	1500	17002	17002	1140	742	7.8	29.0	16.5
JUN								
05...	1000	17002	17002	189	680	8.2	29.5	23.5
JUL								
10...	1400	17002	17002	100	655	8.1	33.5	25.0
AUG								
23...	1200	17002	17002	300	325	7.9	26.5	23.5

DATE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)
OCT									
25...	8.2	22	134	.0	282	56	--	39	6
NOV									
15...	8.9	18	390	.0	304	52	--	23	3
DEC									
28...	18.4	13	K10	.0	318	74	64	16	1
FEB									
01...	--	11	--	.0	350	62	61	24	3
APR									
10...	11.4	14	K100	.0	183	55	25	60	12
MAY									
07...	--	10	--	.0	161	56	--	92	5
07...	--	19	--	.0	155	55	--	335	43
JUN									
05...	7.4	12	2600	.0	222	63	--	29	4
JUL									
10...	8.7	15	280	.0	216	54	--	52	3
AUG									
23...	--	77	--	.0	60	34	--	2780	152

K Results based on colony count outside the acceptable range (non-ideal colony count).

05567510 MACKINAW RIVER BELOW CONGERVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT								
25...	.60	30	110	640	0	210	.0	30
NOV								
15...	.60	.00	50	490	0	140	.0	0
DEC								
28...	1.9	.10	20	410	0	130	.0	--
FEB								
01...	1.4	1.6	0	400	0	310	.0	0
APR								
10...	12	.10	20	850	0	80	.0	0
MAY								
07...	15	.00	10	1700	0	260	.0	10
07...	15	.00	10	3800	0	470	.0	20
JUN								
05...	11	.00	0	300	0	60	.0	0
JUL								
10...	9.5	.00	0	860	0	80	.0	0
AUG								
23...	2.2	.10	30	24000	0	1100	.0	110

05568005 MACKINAW RIVER BELOW GREEN VALLEY, IL

LOCATION.--Lat 40°26'51", long 89°41'28", in NE¼ sec.17, T.23 N., R.5 W., Tazewell County, Hydrologic Unit 07130004, at county road bridge, 1.8 mi (2.9 km) upstream from small left-bank tributary, 3.8 mi (6.1 km) northwest of Green Valley, and at mile 10.1 (16.3 km).

DRAINAGE AREA.--1,092 mi^2 (2,828 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water discharges were determined from Mackinaw River near Green Valley (station 05568000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
OCT								
23...	1500	17002	17002	38	693	8.2	9.0	13.5
NOV								
15...	1100	17002	17002	40	740	8.1	3.0	7.0
DEC								
20...	1100	17002	17002	63	804	8.1	3.0	5.0
JAN								
18...	1100	17002	17002	46	820	--	-13.5	.0
FEB								
28...	1100	17002	17002	700	420	7.7	3.5	1.0
MAR								
29...	1100	17002	17002	2680	524	8.2	20.0	9.0
APR								
25...	1100	17002	17002	970	600	8.1	25.5	16.0
MAY								
22...	1000	17002	17002	--	632	8.6	21.0	18.0
22...	1100	17002	17002	--	622	8.6	21.0	18.0
JUN								
11...	1100	17002	17002	840	600	8.3	33.5	22.0
JUL								
12...	1600	17002	17002	170	642	8.3	32.0	26.5
AUG								
16...	1200	17002	17002	425	650	8.3	23.5	20.5
SEP								
27...	1600	17002	17002	--	650	7.9	29.0	21.0

05568005 MACKINAW RIVER BELOW GREEN VALLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)
OCT									
23...	--	10	--	.0	326	39	--	20	2
NOV									
15...	10.8	12	730	.0	320	--	--	16	4
DEC									
20...	11.6	10	K20	.0	326	48	44	12	4
JAN									
18...	10.4	7	K4	.0	321	48	--	5	2
FEB									
28...	13.9	28	--	.0	98	40	24	112	13
MAR									
29...	10.8	39	2700	.0	146	51	23	630	36
APR									
25...	--	19	--	.0	211	65	23	221	9
MAY									
22...	9.8	10	<10	.0	219	55	--	33	4
22...	9.9	10	30	.0	220	55	--	31	5
JUN									
11...	--	21	--	.0	198	52	--	222	26
JUL									
12...	--	19	--	.0	236	46	--	58	10
AUG									
16...	--	16	--	.0	259	47	--	43	4
SEP									
27...	--	19	--	.0	268	41	--	65	15

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT								
23...	.80	.00	0	440	30	480	.0	180
NOV								
15...	.70	.00	0	680	0	430	.0	0
DEC								
20...	1.4	.20	0	800	0	320	.0	--
JAN								
18...	1.2	.80	0	560	0	450	.0	10
FEB								
28...	3.4	.80	10	1350	0	140	.0	0
MAR								
29...	11	.10	10	7600	30	640	.0	20
APR								
25...	10	.10	20	2700	0	190	.0	10
MAY								
22...	11	.00	0	360	0	50	.0	0
22...	11	.00	0	620	0	110	.0	0
JUN								
11...	9.6	.10	10	3000	0	280	.0	0
JUL								
12...	5.5	.00	0	670	0	110	.1	0
AUG								
16...	2.5	.00	0	940	0	270	.0	0
SEP								
27...	1.2	.00	0	1000	0	340	.0	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05568500 ILLINOIS RIVER AT KINGSTON MINES, IL

LOCATION.--Lat 40°33'10", long 89°46'40", in SE¼SE¼ sec.26, T.7 N., R.6 E., Peoria County, Hydrologic Unit 07130003, on right bank at Kingston Mines, 2.3 mi (3.7 km) downstream from Mackinaw River and at mile 144.4 (232.3 km).

DRAINAGE AREA.--15,819 mi^2 (40,971 km^2).

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1558: 1957. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 428.00 ft (130.454 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1940, nonrecording gage at same site at datum 1.65 ft (0.503 m) higher. Oct. 1, 1940, to Mar. 31, 1942, nonrecording gage at present site and datum. Auxiliary water-stage recorder below mouth of Copperas Creek, 8.4 mi (13.5 km) downstream. Prior to Oct. 30, 1967, auxiliary water-stage recorder at mouth of Copperas Creek, 7.9 mi (12.7 km) downstream.

REMARKS.--Records fair except those for winter periods, which are poor. Occasional regulation at low flow by navigation dam at Peoria. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal (station 05537000). Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--40 years, 14,632 ft^3/s (414.4 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,100 ft^3/s (2,350 m^3/s) May 23, 1943; maximum gage height, 26.02 ft (7.931 m) May 25, 1943; minimum daily discharge, 1,810 ft^3/s (51.3 m^3/s) Oct. 11, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72,300 ft^3/s (2,050 m^3/s) Mar. 24; maximum gage height, 25.22 ft (7.687 m) Mar. 24; minimum daily discharge, 4,050 ft^3/s (115 m^3/s) Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8890	6600	7810	9170	6600	14100	68000	49600	14000	11000	12400	20700
2	8700	6770	8770	10000	6400	15800	68600	50200	13000	11800	11700	20100
3	9510	6420	8950	10900	6900	16400	65800	50200	12500	9800	14400	24200
4	9140	6050	8830	11000	6800	21100	62700	54700	12000	10100	13800	18800
5	8490	6020	8990	10500	6600	27400	61800	52400	11000	14500	13000	16400
6	8480	6170	9850	10000	6400	35700	61200	52100	11000	16700	12000	14700
7	8290	6090	10000	9600	6300	47000	60600	51000	11500	13800	13000	13000
8	7750	5630	9630	9200	6400	53900	56900	48700	12000	13300	15000	11000
9	7000	4950	11200	8600	6400	60800	54400	47200	13000	14000	16500	12000
10	5350	4620	11300	8300	6200	62600	52900	45800	14500	13600	12200	9500
11	4900	4050	7330	8000	6300	67600	51700	44200	16400	12300	13400	8000
12	4750	4240	7140	7600	6500	67600	51800	42300	18300	10000	13600	7500
13	4550	4650	8100	7400	6600	64100	55200	39700	15800	9400	13000	8200
14	4450	5100	8460	7200	6200	64200	64900	39000	14800	10000	12600	7800
15	4550	6770	8850	7000	5800	62400	65500	37300	13800	11100	12200	7000
16	4300	8150	9510	6900	6000	57600	61400	34400	13900	10100	15800	6600
17	4500	7850	9420	6800	6200	57500	58900	32000	14200	9590	11800	6200
18	5400	6870	9110	6700	5600	59300	56300	32900	14000	8980	10000	6200
19	5800	6950	9160	6600	5800	58300	52900	30100	13700	8300	13100	6600
20	5600	7240	9480	6600	6000	65100	50100	29100	12300	7900	19100	7000
21	5150	7780	9490	6700	6200	67400	48100	27500	13200	7800	26200	7500
22	4160	7980	9120	6800	8620	68900	45100	25700	13000	7700	27700	8000
23	5270	7540	8660	6900	9270	70700	43500	24400	16800	7700	27700	6800
24	6010	7860	9130	7000	9440	72200	41400	23400	14200	7600	28200	7400
25	6200	8100	8860	7000	8890	72100	40100	21200	13500	8500	27800	7800
26	6600	8090	8940	6800	10700	71700	43000	19800	11000	11400	27400	7600
27	6510	8590	8350	6700	11000	70900	44100	19000	10000	10800	25100	7000
28	6700	8350	7010	6600	13000	68700	47600	18000	9000	10500	25100	6500
29	6520	7290	7140	6500	---	67100	48600	17100	9300	9580	25000	6200
30	6400	7610	8190	6400	---	66700	50600	16500	10000	9170	24400	6000
31	6510	---	8440	6400	---	66900	---	15900	---	13000	23700	---
TOTAL	196430	200380	275220	241870	203120	1741800	1633700	1091400	391700	330020	556900	302300
MEAN	6336	6679	8878	7802	7254	56190	54460	35210	13060	10650	17960	10080
MAX	9510	8590	11300	11000	13000	72200	68600	54700	18300	16700	28200	24200
MIN	4160	4050	7010	6400	5600	14100	40100	15900	9000	7600	10000	6000

CAL YR 1978 TOTAL 5338010 MEAN 14620 MAX 44300 MIN 4050
WTR YR 1979 TOTAL 7164840 MEAN 19630 MAX 72200 MIN 4050

05568775 SPOON RIVER NEAR WYOMING, IL

LOCATION.--Lat 41°03'47", long 89°47'43", in SE¼SE¼ sec.34, T.13 N., R.6 E., Stark County, Hydrologic Unit 07130005, at bridge on State Highway 91, 0.7 mi (1.1 km) west of Wyoming, 6.0 mi (9.7 km) upstream from Camp Run, and at mile 136.1 (219.0 km).

DRAINAGE AREA.--197 mi^2 (510 km^2).

PERIOD OF RECORD.--April to September 1979. Additional chemical data for water years 1972, 1974-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DJ 06.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
APR									
18...	1400	17002	17002	678	8.1	23.5	15.0	--	11
MAY									
16...	1100	17002	17002	600	8.1	25.0	14.5	--	10
16...	1200	17002	17002	662	8.1	25.0	14.5	--	10
JUN									
13...	1300	17002	17002	720	7.9	26.5	21.0	7.9	22
AUG									
01...	1400	17002	17002	850	8.3	25.5	24.5	--	11
27...	1400	17002	17002	810	8.2	27.0	18.5	--	8

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
APR									
18...	--	--	--	64	29	91	7	12	.00
MAY									
16...	--	.0	218	62	--	56	6	11	.00
16...	--	.0	220	62	--	50	5	11	.10
JUN									
13...	K600	.0	227	62	--	254	23	12	.10
AUG									
01...	--	.0	280	87	--	42	6	5.9	.00
27...	--	.0	287	68	--	48	4	6.9	.00

DATE	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR								
18...	.19	--	--	0	--	--	--	1
MAY								
16...	--	0	970	0	120	.1	20	--
16...	--	0	950	0	110	.1	10	--
JUN								
13...	--	10	4300	0	350	.1	0	--
AUG								
01...	--	0	800	0	80	.0	0	--
27...	--	<10	1000	<50	120	.0	0	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05568800 INDIAN CREEK NEAR WYOMING, IL

LOCATION.--Lat 41°01'06", long 89°50'07", in SE¼SE¼ sec.17, T.12 N., R.6 E., Stark County, Hydrologic Unit 07130005, on left bank at upstream side of county highway bridge, 4.5 mi (7.2 km) southwest of Wyoming and at mile 4.9 (7.9 km).

DRAINAGE AREA.--62.7 mi^2 (162.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 616.78 ft (187.995 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--20 years, 45.5 ft^3/s (1.289 m^3/s), 9.85 in/yr (250 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,540 ft^3/s (185 m^3/s) June 22, 1974, gage height, 13.81 ft (4.209 m), from rating curve extended above 1,400 ft^3/s (39.6 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 0.1 ft^3/s (0.003 m^3/s) Oct. 7-12, 1963, Sept. 16, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 19	1045	*1980	56.1	*10.83	3.301	Apr. 26	0815	1270	36.0	9.57	2.917
Mar. 29	2145	863	24.4	8.44	2.573	May 3	0345	1130	32.0	9.23	2.813
Apr. 12	0630	1100	31.2	9.15	2.789						

Minimum daily discharge, 1.3 ft^3/s (0.037 m^3/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	3.4	7.6	9.6	4.8	12	218	148	41	20	11	4.3
2	3.8	3.7	6.2	7.9	4.7	15	213	178	39	18	11	4.5
3	5.0	3.7	10	6.5	4.5	25	175	557	38	21	10	4.0
4	4.7	3.6	18	5.8	4.3	400	164	189	37	76	9.4	3.7
5	4.1	3.8	13	5.3	4.2	360	157	156	36	32	8.2	3.3
6	4.1	4.8	11	5.0	4.1	230	140	137	34	27	7.0	3.0
7	3.5	5.6	9.8	4.9	4.0	250	129	121	34	26	6.2	2.7
8	3.5	5.4	9.0	4.9	4.0	210	125	112	36	25	6.6	2.7
9	3.3	4.3	8.6	4.9	4.0	230	120	105	37	23	6.2	2.8
10	3.8	4.2	8.0	4.8	4.0	179	112	97	66	22	6.6	2.7
11	5.0	3.6	7.8	4.5	4.0	170	188	97	40	21	6.6	2.6
12	3.8	3.5	7.6	4.8	4.0	125	757	90	36	20	5.6	2.4
13	3.6	7.5	8.2	4.9	3.9	160	257	85	49	20	5.1	2.3
14	3.4	8.1	7.7	4.8	4.0	220	181	81	38	51	5.0	2.3
15	3.4	6.1	7.9	4.5	4.8	255	149	78	35	35	4.8	2.2
16	3.2	4.2	8.2	4.6	4.7	215	127	75	33	24	4.7	2.1
17	3.2	17	8.4	4.8	4.4	185	116	71	32	21	4.7	2.0
18	3.3	16	8.6	4.9	4.1	400	109	70	44	20	21	2.0
19	3.3	7.8	9.0	4.8	4.0	1680	102	68	46	19	14	1.7
20	4.3	6.2	9.3	4.6	4.0	642	98	65	35	18	32	1.8
21	3.3	5.7	8.9	4.5	4.6	265	95	56	32	17	17	1.7
22	3.4	5.6	8.6	4.5	6.0	202	86	54	28	16	13	1.6
23	5.3	9.6	8.0	4.4	11	183	83	54	27	16	12	1.6
24	7.5	10	8.5	4.4	17	154	82	52	27	16	9.0	1.6
25	5.4	6.9	7.9	4.3	19	127	87	51	26	18	6.2	1.6
26	5.3	6.5	7.4	4.3	15	114	800	50	25	19	5.8	1.5
27	5.0	7.4	6.8	4.2	12	105	269	48	24	14	5.6	1.4
28	4.1	5.9	6.4	4.2	11	107	204	44	23	13	5.3	1.4
29	3.9	6.6	6.6	4.2	---	322	176	42	23	13	5.1	1.3
30	3.4	9.9	7.3	4.4	---	539	165	40	22	13	4.8	1.4
31	3.6	---	8.3	4.8	---	358	---	48	---	12	4.6	---
TOTAL	128.1	196.6	268.6	155.0	180.1	8439	5684	3119	1043	706	274.1	70.2
MEAN	4.13	6.55	8.66	5.00	6.43	272	189	101	34.8	22.8	8.84	2.34
MAX	7.5	17	18	9.6	19	1680	800	557	66	76	32	4.5
MIN	3.2	3.4	6.2	4.2	3.9	12	82	40	22	12	4.6	1.3
CFSM	.07	.10	.14	.08	.10	4.34	3.01	1.61	.56	.36	.14	.04
IN.	.08	.12	.16	.09	.11	5.01	3.37	1.85	.62	.42	.16	.04

CAL YR 1978 TOTAL 12384.4 MEAN 33.9 MAX 1250 MIN 2.3 CFSM .54 IN 7.35
WTR YR 1979 TOTAL 20263.7 MEAN 55.5 MAX 1680 MIN 1.3 CFSM .89 IN 12.02

05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
12...	1330	80010	--	3.6	--	--	15.5	14.0	--	--	--
18...	1300	17002	17002	3.3	710	8.6	14.5	10.0	--	12	--
NOV											
13...	1100	17002	17002	6.2	780	8.3	15.5	9.0	--	16	--
28...	1145	80010	--	3.6	--	--	-5.5	2.0	--	--	--
DEC											
04...	1100	17002	17002	18	1000	8.1	-2.0	.0	--	16	--
JAN											
08...	1630	80010	--	4.9	--	--	-14.0	.0	--	--	--
31...	1000	17002	17002	4.8	980	8.7	-12.0	--	12.8	4	--
FEB											
27...	1215	80010	--	12	--	--	5.0	.5	--	--	--
MAR											
05...	1000	17002	17002	360	625	8.3	-1.0	.5	10.8	35	--
APR											
03...	1230	80010	--	175	--	--	10.0	6.0	--	--	--
18...	1100	17002	17002	109	652	8.1	18.0	13.5	--	10	--
MAY											
17...	1630	80010	--	68	--	--	28.0	19.0	--	--	--
JUN											
13...	1100	17002	17002	49	628	7.9	26.5	20.0	8.1	41	5100
27...	1515	80010	--	22	--	--	24.5	22.0	--	--	--
JUL											
17...	1645	80010	80010	20	810	8.4	21.0	23.0	--	--	--
AUG											
01...	1600	17002	17002	11	720	8.5	24.5	24.5	--	11	--
02...	1455	80010	80010	11	730	8.7	27.0	27.0	--	--	--
08...	1530	80010	--	6.2	--	--	33.0	32.5	--	--	--
27...	1500	17002	17002	5.6	730	8.4	27.0	25.5	--	12	--
30...	0920	80010	80010	4.8	775	8.2	24.5	21.5	--	--	--
SEP											
19...	1545	80010	--	1.9	--	--	25.5	20.5	--	--	--

DATE	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2) (00405)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)
OCT											
18...	--	--	--	--	--	--	3	--	6.0	.44	--
NOV											
13...	--	--	--	--	--	--	8	--	.40	.04	--
DEC											
04...	--	--	--	--	--	--	7	--	2.7	.20	--
JAN											
31...	--	--	--	--	--	--	7	--	2.7	1.4	--
MAR											
05...	--	--	--	--	--	--	140	17	8.0	1.0	--
APR											
18...	--	.0	215	--	52	23	93	6	12	.00	--
JUN											
13...	--	.0	220	--	47	--	532	50	8.7	.10	--
JUL											
17...	.0	.0	180	--	55	--	--	--	--	--	--
AUG											
01...	--	.0	277	--	--	57	45	7	5.2	.00	--
02...	.0	.0	260	1.0	54	--	--	--	--	--	--
27...	--	.0	287	--	52	--	37	4	3.4	.00	--
30...	.0	.0	300	3.7	49	--	--	--	--	--	0

05568800 INDIAN CREEK NEAR WYOMING, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)
OCT											
18...	--	--	--	0	--	200	--	--	--	20	--
NOV											
13...	--	--	--	0	--	600	--	--	--	0	--
DEC											
04...	--	--	--	0	--	400	--	--	--	0	--
JAN											
31...	--	--	--	0	--	200	--	--	--	0	--
MAR											
05...	--	--	--	0	--	2000	--	--	--	0	--
APR											
18...	--	--	--	20	--	1300	--	--	--	0	--
JUN											
13...	--	--	--	10	--	8200	--	--	--	0	--
JUL											
17...	--	--	--	--	--	2400	2400	20	--	--	--
AUG											
01...	--	--	--	20	--	430	--	--	--	0	--
02...	--	--	--	--	--	600	580	20	--	--	--
27...	--	--	--	<10	--	800	--	--	--	<50	--
30...	<10	<10	10	--	<10	480	460	20	4100	--	10

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT												
18...	--	--	--	--	.0	--	--	--	--	--	--	--
NOV												
13...	--	--	--	--	.0	--	--	--	--	--	--	--
DEC												
04...	--	--	--	--	.0	--	--	--	--	--	--	--
JAN												
31...	--	--	--	--	.0	--	--	--	--	--	--	--
MAR												
05...	--	--	--	--	.0	--	--	--	--	--	--	--
APR												
18...	120	--	--	--	.0	--	--	20	--	--	--	--
JUN												
13...	650	--	--	--	.1	--	--	0	--	--	--	--
JUL												
17...	110	90	20	--	--	--	--	--	--	146	7.9	71
AUG												
01...	100	--	--	--	.0	--	--	0	--	--	--	--
02...	50	30	20	--	--	--	--	--	--	29	.86	81
27...	180	--	--	--	.0	--	--	0	--	--	--	--
30...	110	50	60	670	--	.00	0	--	10	28	.36	65

05568915 SPOON RIVER NEAR DAHINDA, IL

LOCATION.--Lat 40°54'33", long 90°05'12", in SE¼ sec.30, T.11 N., R.4 E., Knox County, Hydrologic Unit 07130005, at bridge on U.S. Highway 150, 1.6 mi (2.6 km) downstream of Court Creek, 1.7 mi (2.7 km) southwest of Dahinda, and at mile 100.0 (160.9 km).

DRAINAGE AREA.--762 mi^2 (1,974 km^2).

PERIOD OF RECORD.--May to September 1979. Additional chemical data for water years 1959, 1961-62, 1964-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DJ 02.

WATER QUALITY DATA, MAY TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
MAY												
16...	1500	17002	17002	666	8.3	26.5	18.0	--	--	--	--	--
16...	1600	17002	17002	662	8.3	26.5	18.0	--	12	--	.0	215
JUN												
11...	1400	17002	17002	480	7.9	30.0	20.0	--	193	--	.0	135
11...	1500	17002	17002	470	7.8	30.0	20.0	--	202	--	.0	135
JUL												
10...	1000	17002	17002	745	8.2	30.0	24.0	8.1	12	K1500	.0	249
AUG												
09...	1000	17002	17002	710	8.2	33.5	28.5	7.5	15	210	.0	230
30...	1000	17002	17002	758	8.6	30.5	24.5	8.0	10	270	.0	267

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
MAY											
16...	--	--	--	--	--	--	--	--	--	--	--
16...	65	81	5	9.7	.00	0	1300	0	100	.0	10
JUN											
11...	52	2150	220	9.3	.20	50	39000	0	2600	.0	200
11...	52	1930	150	9.5	.02	60	43000	0	3100	.2	200
JUL											
10...	64	122	18	8.1	.00	0	2100	0	160	.0	0
AUG											
09...	81	46	9	1.9	.00	0	450	0	180	.0	0
30...	75	32	5	4.9	.00	0	800	0	70	.0	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

05569500 SPOON RIVER AT LONDON MILLS, IL

LOCATION.--Lat 40°42'51", long 90°16'00", in NW¼NE¼ sec.3, T.8 N., R.2 E., Fulton County, Hydrologic Unit 07130005, on left bank at downstream side of bridge in London Mills, 0.5 mi (0.8 km) upstream from Chicago and North Western Railroad bridge, 1.4 mi (2.3 km) upstream from Cedar Creek, 2.8 mi (4.5 km) downstream from Littlers Creek, and at mile 70.1 (112.8 km).

DRAINAGE AREA.--1,062 mi^2 (2,751 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year.

REVISED RECORDS.--WSP 1175: 1947. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 508.97 ft (155.134 m) National Geodetic Vertical Datum of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records fair except those for winter periods and those for period of no gage-height record, Jan. 10, to Mar. 14, which are poor.

AVERAGE DISCHARGE.--37 years, 693 ft^3/s (19.63 m^3/s), 8.86 in/yr (225 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft^3/s (1,160 m^3/s) June 23, 1974, gage height, 28.03 ft (8.544 m), from graph based on gage readings; minimum, 5.6 ft^3/s (0.16 m^3/s) Sept. 16, 17, 1959, Feb. 2-8, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 26, 1924, reached a stage of 27.08 ft (8.254 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	unknown	5600	159	unknown		Apr. 13	0030	8360	237	19.70	6.005
Mar. 21	2130	9060	257	20.30	6.187	Apr. 27	0045	7410	210	18.82	5.736
Mar. 30	1945	*10100	286	*21.11	6.434	May 3	1900	4790	136	15.44	4.706

Minimum discharge, 38 ft^3/s (1.08 m^3/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	76	161	160	60	1400	7420	2350	670	286	213	107
2	82	71	167	140	60	1600	5690	2100	610	264	180	99
3	101	68	197	120	60	2200	3920	3910	540	251	161	93
4	105	68	250	110	60	4500	3160	4720	500	376	148	84
5	86	68	210	100	62	5200	2790	3500	470	696	136	76
6	73	73	180	95	64	5000	2360	2350	450	389	126	73
7	61	86	160	90	66	4600	2020	2020	440	298	117	68
8	56	96	155	87	66	3500	1890	1790	440	267	107	64
9	59	91	150	85	66	2900	1780	1600	500	251	99	61
10	64	89	140	81	66	2500	1630	1430	800	240	97	60
11	74	90	145	78	66	2000	2140	1350	1300	232	97	58
12	73	96	150	74	65	1800	7370	1360	1100	222	99	55
13	62	105	160	71	66	2500	7760	1270	800	213	91	53
14	60	140	165	70	69	3700	5890	1150	670	258	82	51
15	55	148	170	67	68	3510	3000	1090	630	437	74	48
16	58	138	173	62	66	2630	2270	1000	560	722	70	46
17	49	183	176	62	65	3040	1890	902	500	352	68	46
18	48	295	179	60	63	4430	1660	860	469	274	69	45
19	46	274	192	62	64	7420	1510	803	722	236	105	44
20	46	230	195	65	70	8400	1420	773	1030	217	592	43
21	46	167	213	64	90	8480	1470	732	556	206	803	41
22	52	140	180	64	130	8340	1340	700	450	192	1740	40
23	58	192	186	63	170	5360	1180	660	395	180	1020	39
24	73	251	151	62	280	3280	1110	640	368	171	383	39
25	104	215	145	60	500	2810	1160	600	347	1100	271	40
26	113	197	130	60	580	2380	5580	570	322	735	208	39
27	107	185	120	60	1000	2070	7060	580	310	269	171	40
28	97	183	110	60	1300	1990	6000	600	308	247	146	39
29	97	174	110	60	---	3760	3240	570	308	213	133	39
30	100	156	110	60	---	9290	2700	540	298	310	122	89
31	83	---	120	60	---	9140	---	590	---	293	113	---
TOTAL	2274	4345	5050	2412	5342	129730	98410	43110	16863	10397	7841	171
MEAN	73.4	145	163	77.8	191	4185	3280	1391	562	335	253	57.
MAX	113	295	250	160	1300	9290	7760	4720	1300	1100	1740	10
MIN	46	68	110	60	60	1400	1110	540	298	171	68	3
CFSM	.07	.14	.15	.07	.18	3.94	3.09	1.31	.53	.32	.24	.0
IN.	.08	.15	.18	.08	.19	4.54	3.45	1.51	.59	.36	.27	.0

CAL YR 1978 TOTAL 245665 MEAN 673 MAX 9150 MIN 44 CFSM .63 IN 8.61
WTR YR 1979 TOTAL 327493 MEAN 897 MAX 9290 MIN 39 CFSM .85 IN 11.47

05569500 SPOON RIVER AT LONDON MILLS, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
OCT											
04...	0900	80010	--	103	--	--	17.0	14.5	--	--	--
NOV											
30...	1000	80010	--	145	--	--	-3.5	.5	--	--	--
JAN											
09...	1145	80010	--	85	--	--	-9.0	.0	--	--	--
MAR											
29...	1300	80010	--	2630	--	--	15.0	8.0	--	--	--
MAY											
08...	1315	80010	--	1780	--	--	31.0	18.0	--	--	--
JUN											
18...	1800	80010	--	465	--	--	28.0	24.0	--	--	--
20...	1100	17002	17002	--	362	7.4	29.0	23.5	473	.0	89
JUL											
09...	1200	17002	17002	249	695	8.0	27.0	24.0	16	.0	225
AUG											
03...	1145	80010	--	160	--	--	22.0	24.0	--	--	--
08...	1200	17002	17002	107	668	8.4	31.5	29.5	22	.0	193
SEP											
19...	1400	17002	17002	44	698	8.5	24.0	21.5	25	.0	212

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
JUN											
20...	49	2350	300	7.5	.20	130	97000	200	7400	.0	410
JUL											
09...	69	171	5	7.3	.10	0	3000	0	230	.0	0
AUG											
08...	112	39	11	1.0	.00	0	310	0	170	.0	0
SEP											
19...	103	55	9	.00	.00	0	700	0	470	.1	0

05569520 SPOON RIVER AT ROUTE 116 BRIDGE AT LONDON MILLS, IL

LOCATION.--Lat 40°42'31", long 90°16'53", in NW¼ sec.4, T.8 N., R.2 E., Fulton County, Hydrologic Unit 07130005, at State Highway 116 bridge, 0.5 mi (0.8 km) upstream from Cedar Creek, 1.0 mi (1.6 km) west of London Mills, 1.1 mi (1.8 km) upstream from Swegle Creek, and at mile 69.2 (111.3 km).

DRAINAGE AREA.--1,072 mi² (2,776 km²).

PERIOD OF RECORD.--Water years 1978 to May 1979 (discontinued). Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DJ 04.

REMARKS.--Water discharges were determined from Spoon River at London Mills (station 05569500).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
NOV								
02...	1000	17002	17002	72	862	8.2	15.0	10.0
DEC								
06...	1100	17002	17002	182	875	8.2	-5.5	.0
MAR								
08...	1000	17002	17002	2930	650	7.8	1.5	--
26...	1100	17002	17002	2430	600	8.2	4.5	4.5
APR								
24...	1200	17002	17002	1120	670	8.2	18.5	15.5
MAY								
30...	1500	17002	17002	545	680	8.0	32.0	23.5
30...	1600	17002	17002	545	662	8.0	32.0	23.5

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)
NOV								
02...	20	210	.0	250	154	--	33	4
DEC								
06...	12	310	.0	243	142	37	35	3
MAR								
08...	46	K1000	.0	148	62	21	627	40
26...	25	--	.0	180	65	22	254	20
APR								
24...	14	K300	.0	211	80	23	118	8
MAY								
30...	15	--	.0	225	90	--	75	9
30...	14	--	.0	224	90	--	70	7

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV								
02...	.20	.00	10	720	0	230	.0	20
DEC								
06...	2.1	.20	0	610	0	250	--	20
MAR								
08...	6.9	.50	20	10000	0	920	.0	90
26...	9.7	.10	20	4100	0	330	.0	40
APR								
24...	8.5	.00	10	2200	0	--	.0	20
MAY								
30...	7.7	.00	0	1600	0	250	.0	10
30...	7.7	.00	0	1500	0	240	.0	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

05570000 SPOON RIVER AT SEVILLE, IL

LOCATION.--Lat 40°29'24", long 90°20'26", in NW¼ sec.24, T.6 N., R.1 E., Fulton County, Hydrologic Unit 07130005, near center of span on downstream side of bridge on State Highway 95, 500 ft (152 m) downstream from Shaw Creek, 0.4 mi (0.6 km) northeast of Seville, 0.5 mi (0.8 km) upstream from Toledo, Peoria, and Western Railroad bridge, and at mile 39.2 (63.1 km).

DRAINAGE AREA.--1,636 mi^2 (4,237 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1208: 1917, 1920, 1922, 1924, 1926-27, 1929(M). WSP 1308: 1919(M), 1936(M), 1938(M), 1942(M), 1945(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 467.04 ft (142.354 m) National Geodetic Vertical Datum of 1929. Prior to May 9, 1935, nonrecording gage at site 0.5 mi (0.8 km) downstream and May 9, 1935, to June 30, 1976, at site 0.47 mi (0.76 km) downstream at same datum.

REMARKS.--Water-discharge records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--65 years, 1,030 ft^3/s (29.17 m^3/s), 8.55 in/yr (217 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,300 ft^3/s (1,060 m^3/s) Aug. 22, 1924, gage height, 30.77 ft (9.379 m), from graph based on gage readings; maximum gage height, 31.82 ft (9.699 m) June 24, 1974, from graph based on gage readings; minimum discharge observed, 3.8 ft^3/s (0.11 m^3/s) July 31, Aug. 27-29, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1883 reached a stage of about 33.0 ft (10.06 m), backwater from ice, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft^3/s (170 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 6	0900	7660	217	19.35	5.898	Apr. 13	1830	10500	297	22.10	6.736
Mar. 22	1200	11600	329	22.87	6.971	Apr. 28	0600	9150	259	20.95	6.386
Mar. 31	1800	*12600	357	*23.53	7.172						

Minimum discharge, 48 ft^3/s (1.36 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	118	276	300	110	2000	11700	3380	1040	448	564	118
2	152	105	282	250	110	2200	9770	3010	964	419	398	109
3	261	99	425	250	110	3000	7000	3620	820	386	332	100
4	222	96	364	200	110	6420	4770	5560	766	472	298	96
5	218	99	335	190	110	7430	4120	4870	723	896	269	93
6	149	121	310	180	115	7470	3110	3480	693	792	240	90
7	119	135	280	170	120	5840	2770	2880	690	514	216	90
8	98	143	270	165	120	5070	2500	2520	693	419	198	86
9	88	155	250	155	120	4100	2330	2250	776	383	183	82
10	112	169	240	150	120	3430	2180	2030	1230	362	173	76
11	129	142	250	145	120	2910	3430	1940	2040	346	166	70
12	127	132	260	140	120	2300	8460	2040	1690	326	160	70
13	126	146	280	135	120	2660	10300	1880	1050	304	160	68
14	107	160	270	130	125	4650	10000	1670	1000	377	144	66
15	96	200	290	125	125	5000	7230	1570	986	440	136	66
16	85	221	300	120	120	3940	3670	1480	875	762	128	64
17	85	340	298	115	115	4330	3110	1380	786	679	120	63
18	77	377	296	110	110	5530	2710	1310	729	437	116	62
19	73	497	302	115	110	8270	2460	1260	686	346	116	62
20	71	395	322	120	120	9600	2320	1220	1180	298	523	59
21	71	309	321	120	150	11200	2340	1160	953	274	1180	58
22	72	251	337	120	200	11500	2350	1090	716	253	1940	55
23	116	329	334	115	250	10300	2080	1040	622	233	1830	54
24	111	373	305	110	400	6200	2000	997	573	224	1120	53
25	126	401	268	110	700	4380	2050	950	539	2490	496	53
26	176	336	240	110	800	3220	4970	903	517	2120	309	52
27	167	331	220	110	1400	2670	7940	939	484	1120	221	52
28	148	315	200	110	1800	2660	8770	953	472	619	188	51
29	134	310	200	110	---	5200	6150	886	466	690	162	50
30	133	288	215	110	---	8060	3980	837	460	570	146	49
31	131	---	250	110	---	12100	---	889	---	809	132	---
TOTAL	3910	7093	8790	4500	8030	173640	146570	59994	25219	18808	12364	2117
MEAN	126	236	284	145	287	5601	4886	1935	841	607	399	70.6
MAX	261	497	425	300	1800	12100	11700	5560	2040	2490	1940	118
MIN	71	96	200	110	110	2000	2000	837	460	224	116	49
CFSM	.08	.14	.17	.09	.18	3.42	2.99	1.18	.51	.37	.24	.04
IN.	.09	.16	.20	.10	.18	3.95	3.33	1.36	.57	.43	.28	.05

CAL YR 1978 TOTAL 384695 MEAN 1054 MAX 12900 MIN 48 CFSM .64 IN 8.75
WTR YR 1979 TOTAL 471035 MEAN 1291 MAX 12100 MIN 49 CFSM .79 IN 10.71

05570000 SPOON RIVER AT SEVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT										
04...	1000	80010	--	--	217	--	--	19.0	16.0	--
NOV										
01...	1400	17002	17002	--	118	840	8.3	17.0	13.0	--
14...	1615	80010	--	--	161	--	--	3.0	9.0	--
DEC										
05...	1200	17002	17002	--	337	870	8.3	3.5	.5	13.6
JAN										
10...	0945	80010	--	--	150	--	--	1.0	.0	--
22...	1100	17002	17002	120	--	950	7.8	-1.5	.0	7.6
FEB										
07...	1530	80010	--	120	--	--	--	-1.0	.0	--
26...	1100	17002	17002	800	--	560	--	-1.5	.0	--
MAR										
22...	1415	80010	--	--	10900	--	--	--	11.0	--
28...	1100	17002	17002	--	2740	582	8.2	12.0	6.5	--
APR										
25...	1400	17002	17002	--	1920	670	7.8	24.5	--	9.4
MAY										
21...	1100	17002	17002	--	1160	688	8.4	18.0	18.0	--
21...	1200	17002	17002	--	1160	646	8.4	18.0	18.0	--
JUN										
13...	1200	17002	17002	--	1140	550	7.9	24.0	21.5	--
14...	1130	80010	--	--	1020	--	--	24.0	22.0	--
JUL										
26...	1400	17002	17002	--	2240	358	7.7	30.0	24.5	--
AUG										
07...	1530	80010	--	--	216	--	--	33.0	29.0	--
22...	1200	17002	17002	--	1940	395	7.9	26.0	25.0	--
SEP										
20...	1300	80010	--	--	59	--	--	25.5	18.5	--
26...	1200	17002	17002	--	64	720	8.3	29.5	18.5	--

05570000 SPOON RIVER AT SEVILLE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV										
01...	18	--	.0	246	151	--	47	8	.00	.00
DEC										
05...	12	--	.0	238	153	31	27	3	1.7	.20
JAN										
22...	8	--	.0	269	168	29	9	0	2.1	.60
FEB										
26...	51	--	.0	136	84	20	319	30	3.0	1.5
MAR										
28...	23	--	.0	196	76	22	288	12	9.1	.10
APR										
25...	16	<10	.0	210	50	20	153	4	7.7	.00
MAY										
21...	12	--	.0	209	89	--	151	13	8.0	.00
21...	13	--	.0	211	82	--	149	10	7.9	.00
JUN										
13...	110	--	.0	152	64	--	732	72	8.4	.00
JUL										
26...	102	--	.0	51	36	--	1750	128	2.7	.10
AUG										
22...	85	--	.0	96	55	--	1400	60	2.0	.10
SEP										
26...	24	--	.0	234	107	--	70	12	.00	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
NOV									
01...	--	--	--	0	860	0	270	.0	20
DEC									
05...	.30	.50	2.2	0	910	0	250	.0	0
JAN									
22...	--	--	--	10	260	20	330	.0	30
FEB									
26...	--	--	--	10	4110	0	890	.0	40
MAR									
28...	--	--	--	10	6700	30	--	.0	40
APR									
25...	--	--	--	10	2700	100	220	.0	10
MAY									
21...	--	--	--	20	1800	0	190	.0	20
21...	--	--	--	10	1300	0	160	.0	20
JUN									
13...	--	--	--	40	16000	0	1300	.0	100
JUL									
26...	--	--	--	40	25000	0	2400	.0	100
AUG									
22...	--	--	--	50	24000	0	1600	.0	100
SEP									
26...	--	--	--	0	1600	0	590	.0	0

05570350 BIG CREEK AT ST. DAVID, IL

LOCATION.--Lat 40°29'51", long 90°03'12", in S½SE¼ sec.16, T.6 N., R.4 E., Fulton County, Hydrologic Unit 07130005 on right bank 40 ft (12 m) upstream from highway bridge at north edge of St. David, 4.5 mi (7.2 km) upstream from Evelyn Branch and at mile 19.2 (30.9 km).

DRAINAGE AREA.--26.7 mi^2 (69.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1971 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.88 ft (167.299 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--7 years, 28.9 ft^3/s (0.818 m^3/s), 14.70 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,080 ft^3/s (58.9 m^3/s) June 23, 1974, gage height, 10.25 ft (3.124 m); minimum daily, 2.6 ft^3/s (0.074 m^3/s) Feb. 1-10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 23	unknown	230	6.51	unknown		Mar. 19	0615	833	23.6	6.87	2.094
Mar. 3	2315	454	12.9	5.46	1.664	Mar. 29	2045	251	7.11	4.47	1.362
Mar. 13	2200	224	6.34	4.31	1.314	Apr. 12	0415	*973	27.6	*7.33	2.234

Minimum daily discharge, 3.0 ft^3/s (0.085 m^3/s) July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	5.0	9.1	30	8.5	45	77	34	18	5.8	9.5	4.8
2	7.8	5.3	8.4	25	9.0	60	82	36	15	3.9	9.1	5.6
3	18	5.6	17	20	9.0	224	65	50	14	4.2	10	5.8
4	9.1	5.6	11	17	8.6	301	58	34	12	6.1	9.5	5.6
5	6.6	8.1	10	16	8.5	131	51	31	12	4.4	7.8	4.2
6	6.1	13	9.8	15	8.8	113	44	31	11	3.9	6.9	4.8
7	6.1	8.1	10	13	9.0	154	41	29	15	3.7	6.1	6.9
8	6.1	6.1	10	13	8.6	104	39	30	13	3.5	7.5	5.6
9	5.8	6.6	9.0	12	8.2	98	36	30	13	3.5	7.5	5.6
10	6.1	7.2	9.0	12	8.2	81	32	32	14	3.5	7.5	6.3
11	6.9	4.6	12	11	8.8	72	196	44	11	3.9	5.0	6.3
12	6.1	5.6	16	11	9.0	58	557	35	10	4.6	4.2	4.8
13	6.9	6.9	14	10	9.0	126	140	32	17	5.3	3.9	3.5
14	6.1	6.9	13	10	8.8	136	89	30	13	9.1	3.9	5.3
15	5.3	6.6	11	10	9.2	90	67	30	10	4.6	3.9	6.3
16	5.0	6.6	11	9.0	9.0	83	54	28	8.8	3.3	4.6	6.9
17	5.0	15	10	9.4	8.5	88	46	27	7.8	3.2	4.2	7.2
18	5.0	12	10	10	8.5	134	45	24	7.2	3.2	3.9	5.1
19	5.0	9.8	10	11	8.4	537	43	22	7.2	3.3	4.2	5.8
20	5.0	9.1	12	12	10	181	43	19	7.8	3.3	4.4	5.6
21	5.0	9.1	14	11	35	117	43	21	7.2	3.3	3.9	4.6
22	5.0	10	13	10	50	91	37	20	6.9	3.2	8.8	5.3
23	5.3	20	12	11	90	82	35	19	6.1	3.1	5.6	5.3
24	5.3	12	9.0	10	150	74	34	19	5.3	3.0	4.4	6.1
25	5.6	10	8.5	9.0	80	63	39	19	4.8	55	3.9	6.3
26	6.6	9.8	8.5	9.6	60	56	92	21	5.0	24	3.7	3.9
27	5.8	15	9.5	10	45	50	52	22	6.3	18	3.7	3.7
28	5.3	11	7.0	10	40	69	44	19	6.9	16	4.4	4.2
29	5.0	10	9.0	9.0	---	137	42	17	6.9	13	6.1	4.6
30	5.0	9.4	20	8.6	---	163	38	18	6.6	13	7.8	4.2
31	4.8	---	22	8.8	---	99	---	21	---	15	8.8	---
TOTAL	193.6	270.0	354.8	383.4	725.6	3817	2261	844	298.8	252.9	184.7	160.2
MEAN	6.25	9.00	11.4	12.4	25.9	123	75.4	27.2	9.96	8.16	5.96	5.34
MAX	18	20	22	30	150	537	557	50	18	55	10	7.2
MIN	4.8	4.6	7.0	8.6	8.2	45	32	17	4.8	3.0	3.7	3.5
CFSM	.23	.34	.43	.46	.97	4.61	2.82	1.02	.37	.31	.22	.20
IN.	.27	.38	.49	.53	1.01	5.32	3.15	1.18	.42	.35	.26	.22

CAL YR 1978 TOTAL 8333.2 MEAN 22.8 MAX 400 MIN 4.6 CFSM .85 IN 11.61
WTR YR 1979 TOTAL 9746.0 MEAN 26.7 MAX 557 MIN 3.0 CFSM 1.00 IN 13.58

05570350 BIG CREEK AT ST. DAVID, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1972 to current year.
WATER TEMPERATURES: December 1971 to current year.
SUSPENDED-SEDIMENT DISCHARGE: November 1971 to current year.

INSTRUMENTATION.--Specific conductance and temperature recorder since December 1971.

REMARKS.--Interruptions in daily conductance and temperature records were due to instrument malfunctions. Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1972-76, 1978): Maximum, 2,000 micromhos Mar. 4, 1978; minimum, 307 micromhos July 23, 1975.
WATER TEMPERATURES (water years 1972-78): Maximum recorded, 33.0°C July 5, 6, 1977; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,860 mg/L July 27, 1976; minimum daily mean, 4 mg/L Feb. 7, 1972.
SEDIMENT LOADS: Maximum daily, 6,660 tons (6,040 metric tons) June 22, 1974; minimum daily, 0.05 ton (0.04 metric ton) Feb. 7, 1972.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,140 mg/L Mar. 19; minimum daily mean, 10 mg/L on many days.
SEDIMENT LOADS: Maximum daily, 4,550 tons (4,130 metric tons) Mar. 19; minimum daily, 0.08 ton (0.07 metric ton) July 23.

REVISIONS.--Revised figures of specific conductance and temperature for the water year 1974, superseding those published in the report for 1974, are given herein.

EXTREMES.--1973-74:
Specific conductance: Maximum recorded, 1,780 micromhos Sept. 18, 19; minimum recorded, 335 micromhos June 22.
Water temperatures: Maximum recorded, 29.0°C July 13; minimum recorded, 0.0°C on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	979	796	945	439								
2	955	825	983	898								
3	686	490	1280	933								
4	800	589	1160	513								
5	1000	791	1060	990								
6	1090	778	1580	1010								
7	800	760	1510	1300								
8	903	765	1380	1250								
9	859	810	1320	1200								
10	887	800	1520	1130								
11	881	769	1290	1190								
12	814	686	1440	1090								
13	728	606	1420	1270								
14	881	712	1360	1070								
15	887	800	1340	1210								
16	881	805	1360	1180								
17	1060	910	1370	1080								
18	983	909	1350	1220								
19	990	881	1250	1100								
20	933	876	1190	848								
21	927	834	951	903								
22	933	838	---	---								
23	892	843	---	---								
24	859	796	---	---								
25	854	791	---	---								
26	848	778	---	---								
27	876	712	---	---								
28	834	698	---	---								
29	881	814	---	---								
30	903	829	---	---								
31	997	834	---	---								
MONTH	1090	490	---	---								

05570350 BIG CREEK AT ST. DAVID, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	1290	1270	1210	1050	---	---	1530	1440	1690	1460
2	---	---	1320	1200	1310	1210	---	---	1630	1420	1700	1560
3	---	---	1270	1250	1380	1290	---	---	1460	1090	1590	1450
4	---	---	1280	1250	1440	1020	---	---	1540	1270	1610	1290
5	---	---	1270	1220	1460	990	---	---	1630	1340	1660	1100
6	---	---	1270	1230	932	755	---	---	1510	1480	1620	1220
7	---	---	1650	1270	1060	857	---	---	1510	1490	1660	1490
8	---	---	1570	1000	1130	830	---	---	1520	1420	1590	1330
9	---	---	1550	1380	943	837	---	---	1530	1410	1600	1490
10	---	---	1590	1400	1090	959	---	---	1390	1220	1650	1570
11	---	---	1550	1010	1190	1100	1240	1050	1410	1330	1660	1580
12	---	---	1400	1010	1310	1020	1280	1090	1410	1400	1710	1620
13	---	---	1510	1400	1350	988	1320	1090	1520	1480	1680	1530
14	---	---	1470	1010	1410	1030	1210	1040	1490	1460	1670	1550
15	---	---	1220	905	1280	1030	1270	1120	1480	1440	1650	1540
16	1100	1020	1360	1200	1420	1030	1330	1100	1520	1450	1580	1480
17	1120	1110	1360	892	1440	1260	1350	1290	1510	1410	1580	1500
18	1150	1050	1220	562	1540	1420	1410	1300	1520	1440	1780	1520
19	1160	1110	968	697	1520	811	1390	1320	1470	1280	1780	1640
20	1190	1170	1030	879	960	483	1450	1360	1400	1330	1740	1630
21	1210	1170	1150	1010	1000	472	1460	1130	1460	1310	1670	1580
22	1220	1160	1190	933	826	335	1320	1100	1440	1400	1700	1600
23	1270	1090	1280	1190	975	427	1460	1270	1450	1390	1690	1630
24	1300	1250	1340	1280	1160	982	1460	1350	1460	1370	1740	1580
25	1290	1260	1380	1010	1360	1050	1450	1330	1490	1400	1670	1610
26	1280	1260	1420	1360	---	---	1470	1350	1530	1320	1650	1560
27	1290	1210	1380	1340	---	---	1430	1050	1530	1350	1660	1560
28	1340	1220	1440	886	---	---	1360	1040	1540	1460	1630	1480
29	1250	1020	1010	908	---	---	1400	1150	1570	1450	1470	1160
30	1240	1100	1230	962	---	---	---	---	1560	1430	1560	1250
31	---	---	1050	829	---	---	1650	1530	1570	1510	---	---
MONTH	---	---	1650	562	1540	335	---	---	1630	1090	1780	1100
YEAR	1780	335										

05570350 BIG CREEK AT ST. DAVID, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	17.5	11.0	10.0	---	---	---	---				
2	20.0	17.5	10.5	9.5	---	---	---	---				
3	19.0	17.0	10.5	8.5	---	---	---	---				
4	18.5	17.5	9.5	8.0	9.5	8.5	---	---				
5	18.0	16.0	8.0	6.0	7.5	3.5	1.0	.0				
6	16.5	15.5	6.5	5.5	3.5	2.5	1.5	1.5				
7	19.0	16.5	7.5	5.5	3.0	1.5	2.5	1.0				
8	19.5	18.0	7.5	5.0	3.0	2.0	---	---				
9	21.5	18.5	5.0	3.5	3.5	2.0	---	---				
10	21.5	19.5	4.0	2.0	1.5	.0	---	---				
11	21.5	20.0	4.5	3.0	1.5	.0	---	---				
12	21.0	17.5	7.0	3.5	4.0	1.0	---	---				
13	18.5	17.5	9.0	6.5	4.0	1.5	---	---				
14	18.5	16.5	11.5	8.0	2.0	1.0	---	---				
15	19.0	17.0	11.5	9.5	2.5	1.5	---	---				
16	17.5	14.0	9.0	7.0	1.5	1.0	---	---				
17	14.5	12.5	8.0	5.5	.5	.0	---	---				
18	15.0	13.0	9.5	7.5	.5	.0	---	---				
19	16.5	13.0	8.5	7.0	.0	.0	---	---				
20	16.0	13.5	10.5	8.0	.0	.0	---	---				
21	15.0	12.5	11.0	8.5	1.0	.0	---	---				
22	15.5	12.5	---	---	1.0	.0	---	---				
23	16.5	13.0	---	---	1.5	.0	---	---				
24	17.5	14.5	---	---	3.5	.5	---	---				
25	16.5	14.0	---	---	---	---	---	---				
26	15.0	12.5	---	---	---	---	---	---				
27	14.0	12.5	---	---	---	---	---	---				
28	12.0	10.5	---	---	---	---	---	---				
29	10.5	10.0	---	---	---	---	---	---				
30	12.0	9.0	---	---	---	---	---	---				
31	11.5	10.0	---	---	---	---	---	---				
MONTH	21.5	9.0	---	---	---	---	---	---				

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	18.0	13.0	21.0	16.0	24.0	20.0	23.0	20.5	22.0	20.0
2	---	---	16.5	15.0	22.0	17.0	26.0	22.0	21.0	20.0	20.5	16.5
3	---	---	18.5	13.5	23.0	18.5	24.5	22.5	21.0	19.5	19.5	15.0
4	---	---	17.0	13.5	23.0	19.0	24.5	20.5	20.0	18.0	18.5	13.5
5	---	---	17.5	13.5	21.5	20.0	25.0	20.0	21.5	17.0	18.0	15.0
6	---	---	16.5	13.0	21.0	16.5	26.0	21.0	22.0	19.0	19.0	14.5
7	---	---	14.0	11.5	20.0	19.0	27.5	22.5	21.5	19.5	20.5	17.0
8	---	---	12.0	11.5	20.5	18.0	28.0	23.5	23.0	19.5	22.5	17.0
9	---	---	12.0	10.5	22.5	20.0	28.5	24.5	24.0	21.5	23.0	19.0
10	---	---	15.0	10.5	21.0	18.5	25.5	23.0	23.5	21.5	24.0	21.5
11	---	---	17.0	14.5	19.5	16.5	26.0	22.5	25.5	22.0	24.0	22.0
12	---	---	17.0	14.0	21.0	16.0	28.0	23.5	25.5	21.5	24.5	22.0
13	---	---	16.5	13.0	22.0	17.5	29.0	24.0	26.0	24.0	22.0	18.0
14	---	---	16.5	15.5	22.5	19.0	27.0	24.5	25.5	22.0	18.5	15.0
15	---	---	18.0	14.0	22.5	19.5	25.0	21.5	25.0	22.5	20.0	16.0
16	12.5	11.0	22.0	16.5	20.0	17.0	25.5	21.5	25.0	22.5	21.5	17.5
17	14.5	9.0	21.5	19.0	20.0	16.0	27.0	22.5	25.0	20.5	23.5	19.0
18	13.5	10.5	19.0	17.0	22.5	16.5	26.5	24.0	25.5	21.5	24.5	20.5
19	13.5	11.0	18.5	16.5	24.0	20.5	27.5	24.0	26.0	21.0	24.5	21.0
20	17.0	11.0	21.5	17.5	22.5	20.5	26.5	23.0	26.0	22.0	23.5	21.0
21	16.0	14.5	22.5	20.0	22.5	20.5	25.5	23.5	26.5	23.0	21.0	18.5
22	17.0	13.5	22.0	19.5	21.0	17.5	25.0	21.5	25.5	23.5	18.5	15.0
23	14.0	10.0	21.5	17.0	19.0	16.0	24.5	21.0	25.0	22.5	16.5	14.0
24	14.5	8.0	20.5	16.5	18.5	16.5	24.0	21.0	24.5	20.0	17.5	13.5
25	15.0	11.0	19.5	16.0	20.0	17.0	25.0	21.0	24.0	19.5	19.0	15.0
26	18.5	12.5	18.0	16.5	21.5	17.0	25.0	23.0	26.0	20.5	20.0	15.5
27	18.5	15.5	19.0	15.5	22.5	18.0	26.0	21.5	26.0	23.5	20.0	18.0
28	18.5	16.0	18.0	16.5	23.0	19.0	25.5	23.0	24.0	21.0	20.0	18.5
29	17.5	16.0	20.0	17.0	23.0	19.5	24.0	20.5	24.0	18.5	19.0	17.0
30	17.0	14.5	19.5	16.5	24.5	21.0	23.0	20.0	24.0	20.0	17.5	14.5
31	---	---	19.0	17.5	---	---	23.5	22.0	25.0	22.0	---	---
MONTH	---	---	22.5	10.5	24.5	16.0	29.0	20.0	26.5	17.0	24.5	13.5
YEAR	29.0	.0										

05570350 BIG CREEK AT ST. DAVID, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
05...	0925	80010	80010	6.3	1200	7.7	19.0	15.0	7.6	7.1
NOV										
16...	0845	80010	80010	6.1	1370	7.5	3.0	6.0	9.8	5.6
DEC										
28...	1230	80010	80010	7.1	1750	7.3	.0	.0	13.6	--
FEB										
28...	1330	80010	80010	30	1450	7.7	3.0	1.0	12.8	4.3
MAR										
15...	1315	80010	--	78	--	--	-3.0	2.0	--	--
21...	0830	80010	80010	79	848	7.9	3.5	6.0	14.2	6.2
APR										
24...	1230	80010	80010	22	1210	7.7	21.0	14.8	10.0	9.1
MAY										
03...	0745	80010	--	46	--	--	9.0	8.0	--	--
31...	1430	80010	80010	17	1040	8.4	23.5	22.0	6.2	9.7
JUN										
14...	0800	80010	--	13	--	--	23.0	21.0	--	--
27...	0730	80010	80010	3.0	1300	8.0	26.5	20.0	6.0	6.2
JUL										
25...	1530	80010	80010	96	540	7.6	29.0	24.0	8.1	17
AUG										
08...	0745	80010	80010	3.8	1320	7.8	30.5	26.5	6.3	5.8
SEP										
27...	1600	80010	80010	3.8	1370	7.8	22.0	18.5	--	5.8

DATE	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN, TOT IN BOTTOM MATERIAL (MG/KG AS N) (00603)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)
SEP												
27...	.9	40	1400	4800	4800	0	<10	10	<10	10	15000	10

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)
SEP												
27...	880	.00	0	60	24	.0	24	5.2	3.0	.0	.1	7.5

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39531)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39541)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39787)
SEP												
27...	.0	.0	.0	.9	.0	.0	.0	.0	.0	.0	0	.0

05570350 BIG CREEK AT ST. DAVID, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1190	991	1130	1410	1390	1400	1540	1490	1520			
2	1270	1150	1220	1410	1370	1390	1520	1430	1490			
3	1190	919	1030	1420	1400	1410	1480	626	1070			
4	1200	1050	1140	1430	1410	1420	1400	688	1260			
5	1230	1170	1210	1450	1420	1440	1440	1150	1350			
6	1250	1210	1230	1440	1320	1380	---	---	---			
7	1300	1240	1260	1260	1100	1180	---	---	---			
8	1320	1260	1290	1320	1180	1270	---	---	---			
9	1350	1310	1330	1320	1300	1320	---	---	---			
10	1350	1270	1310	1340	1300	1320	---	---	---			
11	1290	1210	1270	1370	1310	1330	---	---	---			
12	1260	1200	1240	1380	1360	1370	---	---	---			
13	1330	1260	1280	1360	1320	1350	---	---	---			
14	1340	1300	1320	1360	1310	1340	---	---	---			
15	1370	1320	1340	---	---	---	---	---	---			
16	1380	1350	1370	---	---	---	---	---	---			
17	1400	1360	1380	1370	830	1150	---	---	---			
18	1400	1360	1390	---	---	---	---	---	---			
19	1420	1360	1390	---	---	---	---	---	---			
20	1450	1410	1430	---	---	---	---	---	---			
21	1450	1410	1430	---	---	---	---	---	---			
22	1460	1430	1440	---	---	---	---	---	---			
23	1440	1370	1410	---	---	---	---	---	---			
24	1400	1360	1380	---	---	---	---	---	---			
25	1390	1250	1310	---	---	---	---	---	---			
26	1300	1260	1290	---	---	---	---	---	---			
27	1290	1200	1260	---	---	---	---	---	---			
28	1320	1270	1300	---	---	---	---	---	---			
29	1360	1320	1340	---	---	---	---	---	---			
30	1380	1360	1380	---	---	---	---	---	---			
31	1400	1370	1390	---	---	---	---	---	---			
MONTH	1460	919	1310	---	---	---	---	---	---			
		FEBRUARY			MARCH			APRIL			MAY	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

05570350 BIG CREEK AT ST. DAVID, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1											---	
2											---	
3											---	
4											---	
5											---	
6											---	
7											---	
8											---	
9											---	
10											---	
11											---	
12											---	
13											---	
14											---	
15											---	
16											3270	
17											---	
18											---	
19											---	
20											---	
21											---	
22											3290	
23											3110	
24											3100	
25											---	
26											---	
27											---	
28											---	
29											---	
30											---	
31												
MONTH											---	
YEAR	---	---	---									

05570350 BIG CREEK AT ST. DAVID, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.5	16.0	12.0	10.0	11.0	5.0	3.0	4.0			
2	17.0	15.0	16.0	12.5	9.0	10.5	4.5	3.5	4.0			
3	17.5	16.5	17.0	12.5	9.5	11.0	4.5	2.0	3.5			
4	16.5	14.5	15.5	14.0	11.5	12.5	2.0	1.0	1.5			
5	16.5	13.5	15.0	14.5	12.0	13.0	3.5	2.0	2.5			
6	13.5	12.0	12.5	13.0	10.5	11.5	---	---	---			
7	13.0	11.0	12.0	10.5	8.0	9.5	---	---	---			
8	12.5	9.5	11.0	10.0	7.0	8.5	---	---	---			
9	14.5	10.0	12.5	10.5	7.0	8.5	---	---	---			
10	15.0	13.0	14.0	10.5	7.0	9.0	---	---	---			
11	15.0	14.0	14.5	10.5	8.0	10.0	---	---	---			
12	15.5	13.5	14.0	9.5	9.0	9.5	---	---	---			
13	14.0	12.0	13.0	12.0	9.5	11.0	---	---	---			
14	12.0	10.0	11.0	10.5	8.5	9.5	---	---	---			
15	11.5	8.5	10.0	---	---	---	---	---	---			
16	10.5	8.5	9.5	---	---	---	---	---	---			
17	10.5	7.0	9.0	9.0	8.0	8.5	---	---	---			
18	10.5	9.0	10.0	---	---	---	---	---	---			
19	11.0	8.5	10.0	---	---	---	---	---	---			
20	12.0	9.0	10.5	---	---	---	---	---	---			
21	13.5	10.0	12.0	---	---	---	---	---	---			
22	15.0	13.0	14.0	---	---	---	---	---	---			
23	14.0	11.0	13.0	---	---	---	---	---	---			
24	11.5	8.5	10.0	---	---	---	---	---	---			
25	12.5	10.0	11.0	---	---	---	---	---	---			
26	12.5	10.5	11.0	---	---	---	---	---	---			
27	12.5	8.5	11.0	---	---	---	---	---	---			
28	11.0	8.0	10.0	---	---	---	---	---	---			
29	11.0	8.0	9.5	---	---	---	---	---	---			
30	11.5	8.5	9.5	---	---	---	---	---	---			
31	11.5	8.5	10.0	---	---	---	---	---	---			
MONTH	17.5	7.0	12.0	---	---	---	---	---	---			

DAY	FEBRUARY	MARCH	APRIL	MAY
1				
2				
3				
4				
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27				
28				
29				
30				
31				
MONTH				

05570350 BIG CREEK AT ST. DAVID, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	23.0	21.0	22.0	24.0	22.5	23.0
2				---	---	---	22.5	19.0	21.0	23.5	22.0	22.5
3				---	---	---	24.0	21.0	22.5	23.5	22.0	22.5
4				---	---	---	25.0	22.0	23.5	22.5	20.5	21.5
5				---	---	---	25.5	22.5	24.5	22.5	19.5	21.0
6				---	---	---	27.5	24.0	25.5	22.0	19.5	21.0
7				---	---	---	27.0	24.5	25.5	20.5	19.0	19.5
8				---	---	---	27.0	24.5	25.5	19.5	17.5	18.5
9				---	---	---	26.5	24.5	25.5	19.0	17.0	18.0
10				---	---	---	25.5	23.0	24.0	20.0	17.5	18.5
11				---	---	---	23.0	20.0	21.5	21.0	18.5	19.5
12				---	---	---	21.5	18.0	19.5	21.0	19.0	20.0
13				---	---	---	22.0	18.0	20.0	20.0	18.5	19.5
14				---	---	---	20.5	17.5	19.5	18.5	17.0	17.5
15				---	---	---	18.5	16.0	17.0	17.0	15.0	16.0
16				---	---	---	20.5	17.0	18.0	17.0	14.5	15.5
17				---	---	---	22.0	18.0	20.0	17.0	14.5	16.0
18				---	---	---	25.0	21.0	22.5	18.0	15.5	16.5
19				---	---	---	24.5	22.0	23.0	17.5	15.5	16.5
20				---	---	---	24.0	22.0	23.0	17.0	15.0	16.0
21				---	---	---	24.5	21.5	22.5	17.0	16.5	16.5
22				---	---	---	24.0	21.5	23.0	16.5	14.5	15.5
23				---	---	---	23.0	21.5	22.5	15.5	13.5	14.5
24				---	---	---	22.0	19.5	21.0	15.5	13.5	14.5
25				---	---	---	22.0	19.0	20.5	17.0	15.0	15.5
26				23.0	21.5	22.5	21.5	19.5	20.5	17.5	14.5	16.0
27				24.5	22.0	23.0	22.0	20.0	21.0	---	---	---
28				25.0	22.5	23.5	22.5	20.0	21.0	---	---	---
29				24.5	23.0	23.5	22.5	21.0	21.5	---	---	---
30				24.0	22.5	23.5	23.0	20.5	21.5	---	---	---
31				24.0	22.5	23.5	23.5	21.5	22.5	---	---	---
MONTH				---	---	---	27.5	16.0	22.0	24.0	13.5	18.0
YEAR	---	---	---									

05570350 BIG CREEK AT ST. DAVID, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	6.9	60	1.1	5.0	30	.41	9.1	20	.49
2	7.8	52	1.1	5.3	28	.40	8.4	28	.64
3	18	95	4.6	5.6	27	.41	17	24	1.1
4	9.1	25	.61	5.6	25	.38	11	20	.59
5	6.6	20	.36	8.1	23	.50	10	20	.54
6	6.1	16	.26	13	80	2.8	9.8	22	.58
7	6.1	15	.25	8.1	18	.39	10	18	.49
8	6.1	15	.25	6.1	15	.25	10	15	.41
9	5.8	15	.23	6.6	14	.25	9.0	15	.36
10	6.1	17	.28	7.2	16	.31	9.0	13	.32
11	6.9	18	.34	4.6	17	.21	12	10	.32
12	6.1	22	.36	5.6	19	.29	16	10	.43
13	6.9	30	.56	6.9	20	.37	14	10	.38
14	6.1	32	.53	6.9	20	.37	13	10	.35
15	5.3	32	.46	6.6	20	.36	11	10	.30
16	5.0	24	.32	6.6	20	.36	11	10	.30
17	5.0	16	.22	15	78	3.2	10	10	.27
18	5.0	12	.16	12	20	.65	10	10	.27
19	5.0	11	.15	9.8	16	.42	10	10	.27
20	5.0	10	.14	9.1	15	.37	12	10	.32
21	5.0	10	.14	9.1	15	.37	14	10	.38
22	5.0	12	.16	10	16	.43	13	10	.35
23	5.3	14	.20	20	103	5.6	12	10	.32
24	5.3	16	.23	12	20	.65	9.0	10	.24
25	5.6	18	.27	10	17	.46	8.5	10	.23
26	6.6	23	.41	9.8	14	.37	8.5	10	.23
27	5.8	28	.44	15	13	.53	9.5	10	.26
28	5.3	30	.43	11	14	.42	7.0	10	.19
29	5.0	30	.41	10	16	.43	9.0	10	.24
30	5.0	32	.43	9.4	18	.46	20	100	5.4
31	4.8	35	.45	---	---	---	22	100	5.9
TOTAL	193.6	---	15.85	270.0	---	22.42	354.8	---	22.47
		JANUARY			FEBRUARY			MARCH	
1	30	30	2.4	8.5	10	.23	45	105	13
2	25	20	1.4	9.0	10	.24	60	110	18
3	20	20	1.1	9.0	10	.24	224	608	368
4	17	10	.46	8.6	10	.23	301	424	345
5	16	10	.43	8.5	10	.23	131	95	34
6	15	10	.41	8.8	10	.24	113	111	34
7	13	10	.35	9.0	10	.24	154	185	77
8	13	10	.35	8.6	10	.23	104	35	9.8
9	12	10	.32	8.2	10	.22	98	28	7.4
10	12	10	.32	8.2	10	.22	81	28	6.1
11	11	10	.30	8.8	10	.24	72	76	15
12	11	10	.30	9.0	10	.24	58	66	10
13	10	10	.27	9.0	10	.24	126	211	72
14	10	10	.27	8.8	10	.24	136	240	88
15	10	10	.27	9.2	10	.25	90	70	17
16	9.0	10	.24	9.0	10	.24	83	60	13
17	9.4	10	.25	8.5	10	.23	88	60	14
18	10	10	.27	8.5	10	.23	134	675	244
19	11	10	.30	8.4	10	.23	537	3140	4550
20	12	10	.32	10	35	.95	181	565	276
21	11	10	.30	35	45	4.3	117	74	23
22	10	10	.27	50	60	8.1	91	56	14
23	11	10	.30	90	78	19	82	44	9.7
24	10	10	.27	150	145	59	74	40	8.0
25	9.0	10	.24	80	115	25	63	36	6.1
26	9.6	10	.26	60	108	17	56	36	5.4
27	10	10	.27	45	105	13	50	36	4.9
28	10	10	.27	40	105	11	69	291	52
29	9.0	10	.24	---	---	---	137	547	202
30	8.6	10	.23	---	---	---	163	337	148
31	8.8	10	.24	---	---	---	99	65	17
TOTAL	383.4	---	13.22	725.6	---	161.81	3817	---	6701.4

05570350 BIG CREEK AT ST. DAVID, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	77	100	21	34	68	6.2	18	82	4.0
2	82	80	18	36	95	9.2	15	75	3.0
3	65	70	12	50	89	12	14	70	2.6
4	58	50	7.8	34	75	6.9	12	70	2.3
5	51	50	6.9	31	72	6.0	12	70	2.3
6	44	40	4.8	31	71	5.9	11	70	2.1
7	41	40	4.4	29	70	5.5	15	87	3.5
8	39	40	4.2	30	68	5.5	13	75	2.6
9	36	40	3.9	30	65	5.3	13	78	2.7
10	32	40	3.5	32	62	5.4	14	75	2.8
11	196	497	263	44	60	7.1	11	70	2.1
12	557	1040	1560	35	60	5.7	10	65	1.8
13	140	320	121	32	60	5.2	17	72	3.3
14	89	220	53	30	60	4.9	13	65	2.3
15	67	160	29	30	62	5.0	10	65	1.8
16	54	120	17	28	62	4.7	8.8	60	1.4
17	46	80	9.9	27	60	4.4	7.8	55	1.2
18	45	80	9.7	24	60	3.9	7.2	50	.97
19	43	80	9.3	22	60	3.6	7.2	49	.95
20	43	75	8.7	19	60	3.1	7.8	49	1.0
21	43	75	8.7	21	62	3.5	7.2	48	.93
22	37	80	8.0	20	62	3.3	6.9	49	.91
23	35	80	7.6	19	65	3.3	6.1	45	.74
24	34	80	7.3	19	65	3.3	5.3	39	.56
25	39	80	8.4	19	60	3.1	4.8	33	.43
26	92	110	27	21	73	4.1	5.0	31	.42
27	52	390	56	22	65	3.9	6.3	29	.49
28	44	196	23	19	62	3.2	6.9	27	.50
29	42	135	15	17	72	3.3	6.9	25	.47
30	38	95	9.7	18	62	3.0	6.6	25	.45
31	---	---	---	21	101	5.7	---	---	---
TOTAL	2261	---	2337.8	844	---	155.2	298.8	---	50.62
		JULY			AUGUST			SEPTEMBER	
1	5.8	25	.39	9.5	41	1.1	4.8	42	.54
2	3.9	25	.26	9.1	42	1.0	5.6	40	.60
3	4.2	26	.29	10	40	1.1	5.8	38	.60
4	6.1	28	.46	9.5	37	.95	5.6	51	.77
5	4.4	28	.33	7.8	34	.72	4.2	51	.58
6	3.9	30	.32	6.9	32	.60	4.8	43	.56
7	3.7	38	.38	6.1	30	.49	6.9	41	.76
8	3.5	45	.43	7.5	30	.61	5.6	40	.60
9	3.5	51	.48	7.5	30	.61	5.6	39	.59
10	3.5	55	.52	7.5	30	.61	6.3	40	.68
11	3.9	58	.61	5.0	31	.42	6.3	41	.70
12	4.6	52	.65	4.2	32	.36	4.8	43	.56
13	5.3	48	.69	3.9	34	.36	3.5	48	.45
14	6.1	64	1.6	3.9	35	.37	5.3	48	.69
15	4.6	43	.53	3.9	33	.35	6.3	45	.77
16	3.3	40	.36	4.6	30	.37	6.9	43	.80
17	3.2	35	.30	4.2	31	.35	7.2	42	.82
18	3.2	28	.24	3.9	35	.37	5.1	43	.59
19	3.3	19	.17	4.2	38	.43	5.8	43	.67
20	3.3	14	.12	4.4	41	.49	5.6	44	.67
21	3.3	11	.10	3.9	42	.44	4.6	45	.56
22	3.2	10	.09	8.8	42	1.0	5.3	46	.66
23	3.1	10	.08	5.6	40	.60	5.3	45	.64
24	3.0	19	.15	4.4	39	.46	6.1	41	.68
25	55	203	30	3.9	38	.40	6.3	40	.68
26	24	80	5.2	3.7	34	.34	3.9	35	.37
27	18	65	3.2	3.7	29	.29	3.7	30	.30
28	16	56	2.4	4.4	23	.27	4.2	26	.29
29	13	50	1.8	6.1	21	.35	4.6	21	.26
30	13	47	1.6	7.8	19	.40	4.2	21	.24
31	15	43	1.7	8.8	26	.62	---	---	---
TOTAL	252.9	---	55.45	184.7	---	16.83	160.2	---	17.68
YEAR	9746.0		9570.75						

05570360 EVELYN BRANCH NEAR BRYANT, IL

LOCATION.--Lat 40°29'15", long 90°06'08", in NW¼SW¼ sec.19, T.6 N., R.4 E., Fulton County, Hydrologic Unit 07130005, on right bank 200 ft (61 m) upstream from dam, 1.4 mi (2.3 km) upstream from mouth and 1.5 mi (2.4 km) northwest of Bryant.

DRAINAGE AREA.--6.20 mi^2 (16.06 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 568.64 ft (173.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except those for winter periods and those for period of no gage-height record, Dec. 30 to Mar. 15, which are poor.

AVERAGE DISCHARGE.--7 years (water years 1973-79), 5.52 ft^3/s (0.156 m^3/s), 12.09 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 109 ft^3/s (3.09 m^3/s) Apr. 6, 1973, gage height, 3.50 ft (1.067 m), maximum discharge affected by release of stored water about 0.5 mi (0.8 km) upstream; minimum daily, 0.15 ft^3/s (0.004 m^3/s) Feb. 1-9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft^3/s (1.98 m^3/s) Apr. 12, gage height, 2.63 ft (0.802 m); minimum daily, 0.84 ft^3/s (0.024 m^3/s) Sept. 8-10, 16-18, 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	.92	2.7	6.0	1.5	9.0	17	9.2	2.2	2.0	8.9	1.5
2	3.5	1.2	2.6	5.0	1.5	9.0	16	7.5	1.8	1.9	5.8	1.4
3	3.8	1.5	2.8	5.0	1.5	15	16	8.0	1.6	1.9	4.6	1.3
4	3.2	1.7	2.7	4.0	1.5	25	19	7.4	1.4	2.1	4.2	1.2
5	3.0	1.7	2.7	4.0	1.5	20	14	7.0	1.5	3.2	4.4	1.2
6	4.2	2.0	2.6	4.0	1.5	15	13	6.9	1.5	4.2	3.9	1.1
7	3.6	2.0	2.9	3.5	1.5	15	13	6.8	1.8	3.2	3.7	.92
8	2.5	2.0	2.6	3.5	1.5	15	12	6.7	1.9	2.4	4.0	.84
9	1.9	1.9	2.4	3.5	1.5	15	12	6.6	1.9	1.9	3.4	.84
10	1.9	1.9	2.1	3.0	1.5	15	13	6.3	2.0	1.6	2.4	.84
11	2.0	1.9	1.9	3.0	1.5	15	29	6.4	2.3	1.3	2.0	1.0
12	1.8	1.8	1.7	3.0	1.5	20	62	6.1	3.6	.91	2.2	1.0
13	1.7	1.7	1.6	2.5	1.5	20	35	5.9	4.1	1.1	2.3	1.1
14	1.6	1.7	1.6	2.5	1.5	25	23	5.6	3.2	1.8	2.3	1.0
15	1.4	1.4	1.5	2.5	1.5	31	18	4.4	2.4	2.7	2.0	.92
16	1.2	2.7	1.5	2.5	1.5	26	16	3.4	1.8	2.0	1.8	.84
17	1.1	3.9	1.4	2.5	1.5	20	20	2.9	1.6	1.7	1.6	.84
18	1.1	3.6	1.4	2.5	1.5	21	27	3.0	1.3	1.5	1.5	.84
19	1.1	3.2	1.5	2.5	1.5	55	23	2.6	1.2	1.4	1.6	.92
20	1.1	3.0	1.5	2.5	1.5	37	21	2.2	1.1	1.3	1.5	.92
21	1.1	2.8	1.4	2.0	1.5	25	20	1.8	1.1	1.3	1.4	.92
22	1.0	2.7	1.4	2.0	2.0	18	17	1.7	1.1	1.3	1.5	.92
23	1.2	3.0	1.4	2.0	10	17	14	1.6	1.1	1.4	1.7	.84
24	1.2	2.9	1.5	2.0	20	18	14	1.4	2.0	1.5	1.6	.84
25	1.4	2.7	1.5	2.0	15	17	14	2.2	3.3	6.0	1.5	.92
26	1.5	2.7	1.5	2.0	10	15	19	3.7	3.2	7.5	1.4	.92
27	1.4	2.9	1.5	2.0	9.0	13	15	4.4	2.6	5.5	1.3	.92
28	1.2	2.8	1.4	2.0	9.0	13	13	3.7	2.3	4.8	1.4	1.0
29	1.1	2.8	1.4	2.0	---	16	11	2.9	2.3	6.9	1.3	1.0
30	.97	2.7	2.0	2.0	---	19	10	2.4	2.1	4.8	1.3	1.0
31	.92	---	4.0	1.5	---	19	---	2.4	---	7.8	1.3	---
TOTAL	58.99	69.72	60.7	89.0	106.5	613.0	566	143.1	61.3	88.91	79.8	29.80
MEAN	1.90	2.32	1.96	2.87	3.80	19.8	18.9	4.62	2.04	2.87	2.57	.99
MAX	4.3	3.9	4.0	6.0	20	55	62	9.2	4.1	7.8	8.9	1.5
MIN	.92	.92	1.4	1.5	1.5	9.0	10	1.4	1.1	.91	1.3	.84
CFSM	.31	.37	.32	.46	.61	3.19	3.05	.75	.33	.46	.42	.16
IN.	.35	.42	.36	.53	.64	3.68	3.40	.86	.37	.53	.48	.18

CAL YR 1978 TOTAL 1648.96 MEAN 4.52 MAX 25 MIN .92 CFSM .73 IN 9.89
WTR YR 1979 TOTAL 1966.82 MEAN 5.39 MAX 62 MIN .84 CFSM .87 IN 11.80

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1972 to current year.
WATER TEMPERATURES: February 1972 to current year.

INSTRUMENTATION.--Specific conductance and water temperature recorder since February 1972.

REMARKS.--Daily specific conductance record missing Oct. 1-18 due to monitor malfunction, May 31 to Sept. 30 due to removal of instrument during construction. Daily water temperature record missing Jan. 2-4, 6, 8-11, 14, 15, 18, 25, Feb. 1, 4-6, 9, 17, 19 due to monitor malfunction, May 31 to Sept. 30 due to removal of instrument during construction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Mar. 9, 1977; minimum recorded, 742 micromhos Mar. 21, 1979.
WATER TEMPERATURES: Maximum, 32.5°C July 30, 1975; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Minimum recorded, 742 micromhos Mar. 21.
WATER TEMPERATURES: Minimum, 0.5°C Dec. 8, 9.

REVISIONS.--Revised figures of specific conductance and temperature for the water year 1974, superseding those published in the report for 1974, are given herein.

EXTREMES.--1973-74:
Specific conductance: Maximum recorded, 2,390 micromhos Mar. 13; minimum recorded, 1,480 micromhos Oct. 18.
Water temperatures: Maximum recorded, 30.5°C Aug. 13, 18; minimum recorded, 1.0°C Mar. 30.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2280	2190	1890	1780							---	---
2	2200	2170	1850	1830							---	---
3	---	---	1860	1830							---	---
4	---	---	1850	1840							---	---
5	---	---	1900	1850							---	---
6	---	---	1890	1860							2050	1910
7	---	---	1920	1890							2130	1940
8	---	---	1920	1910							---	---
9	---	---	1940	1920							---	---
10	---	---	2170	1930							2150	2060
11	---	---	2130	2110							2170	1900
12	---	---	2130	2100							2280	2030
13	---	---	2090	2070							2390	2230
14	---	---	2040	2020							---	---
15	---	---	2020	1990							2100	1800
16	---	---	1960	1950							1850	1700
17	---	---	1940	1910							---	---
18	1610	1480	1900	1800							---	---
19	1660	1530	---	---							---	---
20	1630	1510	---	---							---	---
21	1620	1590	---	---							---	---
22	1640	1610	---	---							---	---
23	1640	1610	---	---							---	---
24	1690	1610	---	---							---	---
25	1660	1640	---	---							---	---
26	1670	1630	---	---							---	---
27	1650	1630	---	---							---	---
28	1690	1650	---	---							---	---
29	1740	1700	---	---							---	---
30	1770	1730	---	---							2230	1980
31	1780	1760	---	---							---	---
MONTH	---	---	---	---							---	---

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	2000	1970	1940	1910			---	---	2180	2170
2	---	---	1990	1970	1930	1900			---	---	2180	2180
3	---	---	2010	1980	1950	1910			---	---	2210	2190
4	---	---	2020	1990	1960	1930			---	---	2220	2200
5	---	---	2070	2010	1940	1900			---	---	2230	2210
6	---	---	2060	2050	1950	1870			---	---	2220	2210
7	---	---	2090	2060	1950	1880			---	---	2220	2210
8	---	---	2090	2070	1920	1810			---	---	2220	2200
9	---	---	2090	2080	1950	1870			---	---	2210	2200
10	---	---	2120	2090	1960	1930			---	---	2210	2200
11	2020	1990	2120	2100	1950	1900			---	---	2200	2200
12	2010	1980	2130	2100	1910	1860			---	---	2200	2190
13	1980	1890	2140	2120	1880	1860			2010	1840	2190	2180
14	1950	1930	2140	2110	1850	1810			2010	2000	2190	2180
15	1950	1830	2130	2110	1840	1800			2010	2000	2190	2180
16	2020	1770	2120	2090	1850	1830			2020	2010	2200	2180
17	1940	1810	2120	2090	1860	1820			2040	2020	2200	2180
18	1920	1870	2110	2080	1860	1820			2040	2030	2200	2180
19	1870	1870	2090	1950	1850	1810			2040	2030	2190	2160
20	1980	1860	2040	1960	---	---			---	---	2190	2180
21	1980	1940	2000	1950	---	---			---	---	2200	2190
22	1950	1930	2040	1970	---	---			---	---	2210	2200
23	1940	1920	1980	1910	---	---			2090	2070	2220	2210
24	1950	1930	1970	1940	---	---			2100	2080	2230	2220
25	1980	1940	1970	1930	---	---			2110	2090	2250	2220
26	1980	1950	1950	1930	---	---			2130	2110	2250	2240
27	1990	1970	2040	1940	---	---			2130	2120	2260	2250
28	2010	1970	2100	1970	---	---			2130	2130	2270	2250
29	2000	1960	2000	1950	---	---			2160	2140	2280	2270
30	1980	1960	1950	1870	---	---			2170	2150	2290	2270
31	---	---	1960	1910	---	---			2180	2160	---	---
MONTH	---	---	2140	1870	---	---			---	---	2290	2160
YEAR	---	---										

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	18.0	13.0	12.5	7.0	6.5					---	---
2	20.0	20.0	12.5	12.0	7.0	6.5					---	---
3	---	---	12.5	11.5	8.0	6.5					---	---
4	---	---	12.0	10.5	7.5	7.0					---	---
5	---	---	10.5	9.5	7.0	6.0					---	---
6	---	---	10.0	9.0	5.5	5.0					12.0	9.5
7	---	---	9.0	9.0	5.0	3.0					11.0	7.0
8	---	---	9.0	8.0	3.5	2.5					11.0	10.5
9	---	---	8.0	7.5	4.0	3.0					12.0	9.0
10	---	---	7.5	6.5	4.0	3.0					10.5	7.0
11	---	---	7.0	6.5	---	---					8.0	6.0
12	---	---	7.5	6.5	---	---					10.5	5.0
13	---	---	7.5	6.5	---	---					9.5	5.0
14	---	---	8.0	6.5	---	---					10.0	7.0
15	---	---	7.5	7.0	---	---					8.0	5.0
16	---	---	8.0	7.0	---	---					---	---
17	---	---	7.5	6.5	---	---					8.5	4.0
18	20.0	18.0	8.5	7.0	---	---					9.5	3.5
19	18.5	17.5	8.0	7.0	---	---					6.5	4.0
20	19.5	17.5	8.5	8.0	---	---					---	---
21	17.5	17.0	8.5	8.0	---	---					---	---
22	17.5	16.5	8.5	7.5	---	---					---	---
23	17.5	16.5	8.5	8.0	---	---					---	---
24	17.5	16.5	8.5	8.5	---	---					---	---
25	17.0	16.5	8.5	8.0	---	---					---	---
26	18.5	15.5	8.0	8.0	---	---					---	---
27	17.0	15.0	8.0	8.0	---	---					---	---
28	15.0	14.5	8.0	7.0	---	---					7.0	4.0
29	14.5	14.0	7.5	6.5	---	---					8.5	3.5
30	14.5	13.5	8.0	6.5	---	---					6.5	1.0
31	13.5	13.0	---	---	---	---					---	---
MONTH	---	---	13.0	6.5	---	---					---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	3.0	21.0	17.5	24.0	20.5			---	---	25.0	24.0
2	---	2.0	19.5	19.0	23.5	21.5			---	---	24.0	22.0
3	11.0	7.5	20.5	17.5	23.5	22.0			---	---	23.5	21.5
4	7.5	5.0	20.5	18.0	24.5	22.5			---	---	23.0	20.5
5	---	---	19.5	17.5	24.0	23.5			---	---	23.0	20.5
6	---	---	20.0	17.5	24.0	23.5			---	---	22.0	20.0
7	11.5	6.0	17.5	16.0	23.5	23.5			---	---	21.5	20.0
8	---	---	16.0	15.0	24.0	23.0			---	---	22.5	20.5
9	---	---	15.0	14.5	24.0	23.0			---	---	22.5	21.5
10	---	---	15.5	14.0	23.5	22.5			---	---	22.5	21.5
11	9.0	7.0	17.5	15.0	23.5	22.0			---	---	23.0	21.5
12	9.5	8.0	17.0	15.0	24.5	22.0			---	---	23.0	21.0
13	13.0	9.0	16.0	15.0	24.0	22.5			30.5	28.5	22.0	20.5
14	10.0	9.0	16.5	16.0	25.5	23.5			30.0	27.5	21.0	19.5
15	12.0	9.0	18.5	16.0	26.0	24.0			29.0	28.0	20.0	19.0
16	14.5	7.0	19.0	17.0	24.0	23.5			28.5	27.5	21.0	19.5
17	13.0	11.5	20.5	19.0	24.5	23.0			29.5	26.5	21.0	19.5
18	13.5	12.5	21.5	20.0	24.5	23.0			30.5	27.0	23.0	20.5
19	14.5	13.0	22.0	20.0	25.5	24.0			28.5	27.0	22.0	20.5
20	14.0	13.5	24.0	21.0	---	---			---	---	21.5	21.0
21	14.5	14.0	23.5	21.5	---	---			---	---	21.5	19.5
22	16.5	14.5	25.5	22.5	---	---			---	---	20.5	19.0
23	15.0	14.0	25.5	23.0	---	---			29.5	27.0	19.0	18.0
24	16.0	13.5	24.0	22.0	---	---			29.5	26.5	18.0	17.5
25	15.0	14.0	23.5	21.5	---	---			27.5	26.5	20.0	17.0
26	17.0	14.5	22.5	21.0	---	---			28.0	26.0	18.5	17.0
27	17.0	16.5	21.5	21.0	---	---			27.5	26.5	19.0	18.0
28	18.0	17.0	21.0	20.5	---	---			26.5	25.5	19.0	17.5
29	18.5	17.5	22.0	20.5	---	---			28.0	25.0	18.5	17.0
30	19.0	17.5	22.0	21.5	---	---			25.5	25.0	18.0	16.5
31	---	---	21.5	21.0	---	---			26.5	24.5	---	---
MONTH	19.0	2.0	25.5	14.0	---	---			---	---	25.0	16.5
YEAR	---	---										

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
05...	1140	80010	80010	2.8	1870	8.1	11.5	18.5	8.8	8.0
NOV										
15...	1415	80010	80010	1.2	2140	8.1	3.0	9.9	9.8	6.1
30...	1030	80010	--	--	--	--	--	3.5	--	--
DEC										
28...	1345	80010	80010	1.4	2280	7.9	.0	3.0	16.2	6.2
JAN										
23...	0845	80010	--	--	--	--	--	3.0	--	--
MAY										
02...	1400	80010	80010	6.7	1550	8.8	19.0	16.0	10.8	12
31...	1230	80010	80010	2.3	2050	8.5	24.0	24.0	8.4	9.5
JUN										
27...	0900	80010	80010	3.1	1980	8.2	30.0	25.0	7.9	11
JUL										
26...	1000	80010	80010	8.4	1960	8.4	29.5	27.5	7.6	10
SEP										
28...	1200	80010	80010	1.0	2080	8.4	26.0	21.5	--	5.3

DATE	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN, TOT IN BOTTOM MATERIAL (MG/KG AS N) (00603)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)
JUL												
26...	7.4	297	170000	170000	1300	16	320	3400	70	2200	71000	1400
SEP												
28...	2.0	27	4700	4700	410	0	<10	10	<10	10	16000	<10

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	ALORIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	ODD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)
JUL												
26...	530	2.1	--	4900	--	--	--	--	--	--	--	--
SEP												
28...	780	.00	0	50	0	.0	0	.0	.0	.0	.0	.0

DATE	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39531)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39541)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39787)
JUL												
26...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
28...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	2200	2180	2190	2260	2240	2250	2330	2290	2300
2	---	---	---	2220	2200	2210	2260	2230	2250	2340	2280	2320
3	---	---	---	2210	2200	2200	2250	2220	2240	2330	2240	2300
4	---	---	---	2200	2190	2190	2260	2230	2250	2330	2300	2330
5	---	---	---	2190	2180	2180	2260	2240	2250	2340	2320	2330
6	---	---	---	2180	2170	2170	2240	2230	2240	2340	2270	2310
7	---	---	---	2180	2160	2170	2240	2230	2240	2340	2300	2330
8	---	---	---	2190	2150	2170	2250	2240	2240	2340	2300	2330
9	---	---	---	2180	2170	2180	2260	2230	2250	2340	2300	2330
10	---	---	---	2180	2160	2170	2270	2240	2260	2340	2330	2340
11	---	---	---	2170	2150	2160	2280	2260	2270	2340	2310	2340
12	---	---	---	2160	2150	2160	2270	2260	2260	2340	2320	2340
13	---	---	---	2160	2140	2160	2260	2240	2250	2350	2340	2340
14	---	---	---	2160	2140	2150	2260	2240	2250	2360	2330	2340
15	---	---	---	2150	2120	2140	2260	2250	2260	2350	2300	2340
16	---	---	---	2150	2140	2140	2270	2250	2260	2360	2340	2350
17	---	---	---	2150	2130	2140	2270	2260	2260	2370	2340	2360
18	---	---	---	2160	2140	2150	2290	2260	2270	2370	2340	2350
19	2030	2010	2020	2160	2150	2150	2280	2270	2270	2380	2360	2370
20	2030	2020	2030	2170	2160	2160	2280	2260	2270	2380	2370	2380
21	2050	2030	2040	2180	2170	2170	2280	2260	2270	2380	2370	2380
22	2060	2050	2060	2190	2180	2190	2280	2270	2280	2390	2370	2380
23	2070	2050	2060	2210	2190	2200	2290	2270	2280	2390	2380	2380
24	2080	2060	2070	2210	2200	2200	2290	2280	2280	2390	2360	2380
25	2100	2080	2100	2220	2210	2210	2300	2280	2290	2400	2370	2380
26	2110	2100	2110	2220	2200	2220	2300	2280	2290	2390	2370	2380
27	2130	2120	2120	2230	2200	2230	2300	2290	2300	2390	2380	2380
28	2140	2130	2130	2240	2230	2240	2300	2290	2300	2390	2360	2380
29	2150	2130	2140	2250	2240	2250	2300	2300	2300	2400	2370	2390
30	2170	2150	2160	2260	2240	2250	2300	2290	2300	2390	2370	2380
31	2180	2170	2180	---	---	---	2300	2290	2300	2380	2350	2370
MONTH	---	---	---	2260	2120	2180	2300	2220	2270	2400	2240	2350
	FEBRUARY			MARCH			APRIL			MAY		
1	2390	2350	2370	1780	1710	1740	1400	1390	1400	1560	1510	1530
2	2390	2370	2380	1770	1720	1750	1450	1400	1420	1560	1520	1540
3	2380	2350	2370	1720	1590	1650	1470	1450	1460	1530	1510	1520
4	2400	2340	2370	1610	1230	1420	1500	1470	1480	1530	1520	1530
5	2400	2340	2370	1230	1140	1170	2010	1510	1670	1650	1530	1590
6	2390	2360	2380	1150	1130	1140	1690	1560	1630	1650	1590	1620
7	2410	2360	2390	1160	1150	1160	1620	1580	1590	1670	1630	1650
8	2400	2370	2390	1200	1130	1160	1580	1560	1570	1700	1650	1670
9	2410	2360	2380	1200	1170	1190	1600	1560	1580	1710	1680	1690
10	2400	2370	2380	1170	1140	1150	1580	1530	1560	1710	1670	1690
11	2400	2340	2380	1180	1140	1160	1540	1390	1510	1700	1650	1670
12	2380	2370	2380	1300	1180	1230	1700	1530	1620	1700	1650	1670
13	2380	2350	2360	1310	1270	1280	1630	1570	1600	1700	1650	1670
14	2370	2340	2360	1280	1190	1240	1570	1440	1500	1690	1680	1680
15	2380	2360	2370	1170	1120	1140	1480	1430	1450	1690	1660	1680
16	2370	2350	2360	1120	1090	1100	1440	1400	1420	1740	1680	1710
17	2380	2350	2370	1110	1100	1100	1450	1410	1440	1790	1720	1750
18	2380	2370	2380	1130	1060	1100	1460	1400	1430	1810	1760	1790
19	2380	2350	2370	1150	944	1060	1460	1420	1430	1840	1770	1810
20	2380	2360	2370	944	830	874	1530	1430	1470	1860	1770	1820
21	2380	2360	2370	862	742	797	1460	1430	1450	1870	1860	1860
22	2350	2300	2330	880	773	832	1440	1380	1420	1900	1850	1870
23	2300	2100	2150	1360	853	1050	1390	1310	1340	1900	1860	1890
24	2130	2070	2100	1140	981	1070	1390	1300	1360	1920	1880	1910
25	2070	1870	1980	1090	1080	1090	1470	1380	1430	1940	1900	1920
26	1870	1680	1760	1160	1080	1110	1530	1460	1510	1960	1920	1940
27	1680	1600	1640	1170	1120	1140	1570	1520	1540	1990	1940	1970
28	1710	1630	1660	1890	1150	1340	1570	1510	1550	2030	1920	1990
29	---	---	---	1900	1280	1490	1550	1500	1520	2020	1960	2000
30	---	---	---	2350	1420	1650	1540	1510	1520	2110	1970	2040
31	---	---	---	1420	1380	1400	---	---	---	---	---	---
MONTH	2410	1600	2270	2350	742	1220	2010	1300	1500	2110	1510	1770

05570360 EVELYN BRANCH NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	19.0	19.5	14.5	12.0	13.0	4.5	3.5	4.0	2.5	2.0	2.5
2	19.5	19.0	19.0	13.0	11.5	12.0	4.0	3.5	3.5	---	---	---
3	19.5	19.0	19.0	12.5	11.5	12.0	3.5	2.5	3.0	---	---	---
4	19.5	18.0	18.5	14.0	12.0	13.0	3.0	2.5	2.5	---	---	---
5	18.5	18.0	18.0	13.0	12.5	13.0	3.0	2.0	2.5	2.5	2.5	2.5
6	17.5	17.0	17.5	13.0	12.0	12.5	2.0	1.0	1.5	---	---	---
7	17.0	16.0	16.5	13.5	11.5	12.5	1.5	1.0	1.0	2.5	2.5	2.5
8	16.5	15.5	16.0	12.0	11.0	11.5	1.0	.5	1.0	---	---	---
9	16.0	15.5	15.5	11.5	11.0	11.0	1.5	.5	1.0	---	---	---
10	15.5	15.5	15.5	11.0	10.5	11.0	1.5	1.0	1.0	---	---	---
11	15.5	15.5	15.5	11.5	11.0	11.0	1.5	1.0	1.0	---	---	---
12	16.0	15.0	15.5	11.0	10.5	10.5	1.5	1.0	1.5	3.0	2.5	2.5
13	17.0	15.0	16.0	11.5	10.5	11.0	1.5	1.0	1.5	3.0	3.0	3.0
14	15.5	14.5	15.0	11.0	10.0	10.5	2.0	1.0	1.5	---	---	---
15	15.0	14.0	14.5	10.0	10.0	10.0	2.0	1.5	1.5	---	---	---
16	14.5	13.5	14.0	9.5	9.0	9.0	2.5	1.5	2.0	3.0	3.0	3.0
17	13.5	13.0	13.5	9.0	8.5	9.0	2.5	2.0	2.0	3.5	3.0	3.0
18	13.5	13.0	13.0	9.0	8.0	8.5	3.0	2.0	2.5	---	---	---
19	13.5	12.5	12.5	8.0	7.5	8.0	2.5	2.0	2.5	3.5	3.0	3.0
20	13.0	12.0	12.5	7.5	7.0	7.5	2.0	2.0	2.0	3.5	3.0	3.0
21	14.0	12.5	13.0	7.0	6.5	6.5	3.0	1.5	2.0	3.0	3.0	3.0
22	15.0	13.5	14.0	6.5	6.0	6.5	3.5	2.5	3.0	3.0	3.0	3.0
23	14.0	13.5	14.0	6.5	6.0	6.5	3.0	2.5	2.5	3.0	3.0	3.0
24	13.5	12.5	13.0	6.5	5.5	6.0	2.5	2.5	2.5	3.0	2.5	3.0
25	13.0	12.5	13.0	6.0	5.5	5.5	3.0	2.5	2.5	---	---	---
26	14.0	12.5	13.0	5.5	4.5	5.5	3.0	2.5	2.5	2.5	2.5	2.5
27	12.5	12.0	12.5	5.0	5.0	5.0	3.0	2.5	2.5	2.5	2.5	2.5
28	13.5	11.5	12.5	5.0	4.0	4.5	3.0	2.5	2.5	2.5	2.5	2.5
29	12.5	12.0	12.0	4.5	3.5	4.0	3.0	2.5	2.5	2.5	2.0	2.5
30	12.0	11.5	12.0	4.0	3.0	3.5	2.5	2.0	2.0	2.5	2.5	2.5
31	13.5	11.5	12.0	---	---	---	2.5	2.5	2.5	2.5	2.0	2.5
MONTH	20.5	11.5	15.0	14.5	3.0	9.0	4.5	.5	2.0	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	2.0	2.0	2.0	10.0	9.0	9.5	17.0	15.5	16.0
2	2.5	2.5	2.5	2.0	2.0	2.0	9.0	8.5	9.0	17.0	16.0	16.5
3	2.5	2.0	2.5	2.0	2.0	2.0	11.0	8.0	9.5	17.0	16.5	16.5
4	---	---	---	2.0	2.0	2.0	10.0	9.0	9.5	17.5	16.0	16.5
5	---	---	---	1.5	1.5	1.5	10.5	9.0	9.5	17.0	15.5	16.5
6	---	---	---	2.5	1.5	2.0	10.5	7.5	9.0	17.5	16.5	17.0
7	2.5	2.0	2.5	2.0	1.5	2.0	10.0	9.0	9.5	19.0	17.0	18.0
8	2.5	2.5	2.5	2.0	2.0	2.0	11.0	10.0	10.5	21.0	18.5	20.0
9	---	---	---	2.0	2.0	2.0	10.5	9.5	10.0	23.5	20.5	22.0
10	2.5	2.0	2.5	2.5	2.0	2.0	11.0	9.5	10.0	25.0	23.0	24.0
11	2.5	2.5	2.5	3.0	2.0	2.5	10.5	10.0	10.5	25.0	22.5	23.5
12	2.5	2.5	2.5	2.5	2.0	2.5	11.5	10.0	10.5	24.0	21.5	22.5
13	2.5	2.5	2.5	3.0	2.0	2.5	12.5	11.0	11.5	22.5	21.0	21.5
14	2.5	2.5	2.5	3.0	2.5	2.5	14.0	12.0	12.5	23.5	21.0	22.0
15	2.5	2.5	2.5	3.5	2.5	3.0	15.5	12.5	14.0	24.0	21.5	22.5
16	2.5	2.0	2.0	4.0	3.0	3.5	18.0	14.0	15.5	22.5	21.0	21.5
17	---	---	---	3.5	3.5	3.5	18.0	15.0	16.0	22.5	21.0	21.5
18	2.5	2.0	2.5	4.5	3.5	4.0	18.0	16.0	17.0	23.0	21.5	22.0
19	---	---	---	5.5	4.0	5.0	17.5	16.5	16.5	26.5	22.5	24.0
20	2.5	2.0	2.5	6.0	5.5	6.0	17.0	15.5	16.0	27.0	23.5	25.0
21	3.0	2.5	2.5	7.5	6.0	6.5	17.0	16.5	17.0	25.0	23.5	24.0
22	2.5	2.0	2.5	7.5	6.5	7.0	17.5	16.0	16.5	24.5	22.5	23.0
23	2.5	2.0	2.5	8.0	6.5	7.5	18.0	16.5	17.5	24.0	22.0	22.5
24	2.5	1.5	2.0	8.0	6.0	7.0	18.0	17.5	18.0	22.0	21.0	21.5
25	2.0	1.5	1.5	6.5	5.0	5.5	19.5	16.5	17.5	22.0	20.5	21.0
26	2.0	1.5	2.0	7.0	5.5	6.0	20.0	17.5	18.5	21.0	20.0	20.5
27	2.0	1.5	2.0	7.5	5.5	6.5	18.5	16.5	18.0	22.0	19.5	20.5
28	2.0	2.0	2.0	8.0	6.5	7.0	17.0	16.0	16.5	24.0	20.0	21.5
29	---	---	---	8.5	7.0	8.0	16.5	16.0	16.0	22.5	21.0	21.5
30	---	---	---	11.0	7.5	9.5	17.5	15.0	16.0	23.5	21.5	22.5
31	---	---	---	10.0	10.0	10.0	---	---	---	---	---	---
MONTH	---	---	---	11.0	1.5	4.5	20.0	7.5	13.5	27.0	15.5	21.0

05570370 BIG CREEK NEAR BRYANT, IL

LOCATION.--Lat 40°27'32", long 90°08'00", in center of sec.35, T.6 N., R.3 E., Fulton County, Hydrologic Unit 07130005, on left bank at upstream side of culvert on county road, 2.0 mi (3.2 km) southwest of Bryant, 2.1 mi (3.4 km) downstream from Evelyn Branch, 4.5 mi (7.2 km) northeast of Lewiston, and at mile 12.5 (20.1 km).

DRAINAGE AREA.--40.3 mi^2 (104.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1971 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 504.54 ft (153.784 m) National Geodetic Vertical Datum of 1929 (Metropolitan Sanitary District of Greater Chicago bench mark).

REMARKS.--Water-discharge records poor.

AVERAGE DISCHARGE.--7 years (water years 1973-79), 42.2 ft^3/s (1.195 m^3/s), 14.22 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) June 23, 1974, gage height, 12.90 ft (3.932 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) Feb. 1-10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft^3/s (8.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0215	483	13.7	9.64	2.938	Apr. 12	unknown	*900	25.5	unknown	
Mar. 19	0330	730	20.7	10.92	3.328	July 25	unknown	350	9.91	unknown	

Minimum daily discharge, 4.9 ft^3/s (0.14 m^3/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	9.0	13	52	12	65	121	56	25	9.0	21	8.0
2	12	9.5	12	45	12	120	130	66	25	8.0	17	8.0
3	20	9.7	20	28	12	208	106	70	20	8.0	16	8.0
4	14	9.7	15	24	12	378	101	55	17	9.0	16	8.0
5	12	9.7	14	22	12	192	83	45	17	9.0	15	7.0
6	12	14	14	21	12	151	71	45	15	9.0	13	7.0
7	11	14	14	20	12	206	66	45	20	8.0	12	9.0
8	10	11	14	18	12	152	62	45	18	8.0	14	8.0
9	9.5	10	13	17	12	143	59	45	18	7.0	13	8.0
10	10	10	13	16	12	121	60	45	18	6.0	12	8.0
11	11	9.5	20	16	13	99	250	60	16	6.0	9.0	8.0
12	10	8.8	23	16	13	89	700	50	16	6.0	8.0	7.0
13	9.5	10	18	14	13	162	220	45	25	7.0	6.5	6.0
14	9.5	10	15	14	13	217	130	40	20	12	6.5	7.0
15	9.0	9.5	14	14	13	135	100	40	15	8.0	7.0	8.0
16	9.2	10	13	14	14	113	90	35	15	7.0	7.0	9.0
17	8.7	29	12	14	13	116	90	35	12	6.1	7.0	9.0
18	8.7	17	12	15	12	153	80	30	12	5.5	7.0	8.0
19	9.0	13	12	16	12	583	75	30	12	5.5	7.0	8.0
20	9.0	12	14	17	16	223	75	25	10	5.0	7.0	7.0
21	9.2	12	18	16	50	148	70	30	10	5.0	7.0	7.0
22	8.5	13	16	15	71	114	64	30	9.0	5.0	12	7.0
23	10	22	17	16	132	103	57	25	9.0	5.0	9.0	7.0
24	10	17	12	14	188	98	56	25	9.0	5.0	7.5	8.0
25	11	14	11	13	129	93	60	25	9.0	105	6.5	8.0
26	12	14	11	14	93	81	126	30	9.0	45	6.0	5.5
27	10	18	11	14	74	81	92	30	10	28	6.0	4.9
28	9.7	16	10	14	55	111	74	30	10	24	7.0	5.5
29	9.2	14	12	13	---	230	67	25	10	22	9.0	5.9
30	9.2	13	25	12	---	198	60	25	9.0	20	11	5.5
31	9.5	---	28	12	---	150	---	30	---	25	12	---
TOTAL	326.4	388.4	466	566	1044	5033	3395	1212	440.0	438.1	314.0	220.3
MEAN	10.5	12.9	15.0	18.3	37.3	162	113	39.1	14.7	14.1	10.1	7.34
MAX	20	29	28	52	188	583	700	70	25	105	21	9.0
MIN	8.5	8.8	10	12	12	65	56	25	9.0	5.0	6.0	4.9
CFSM	.26	.32	.37	.45	.93	4.02	2.80	.97	.37	.35	.25	.18
IN.	.30	.36	.43	.52	.96	4.65	3.13	1.12	.41	.40	.29	.20

CAL YR 1978 TOTAL 12497.1 MEAN 34.2 MAX 446 MIN 8.5 CFSM .85 IN 11.54
WTR YR 1979 TOTAL 13843.2 MEAN 37.9 MAX 700 MIN 4.9 CFSM .94 IN 12.78

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1972 to current year.
WATER TEMPERATURES: April 1972 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1971 to current year.

INSTRUMENTATION.--Specific conductance and water temperature recorder since April 1972.

REMARKS.--Interruptions in daily conductance and temperature records were due to instrument malfunctions. Suspended-sediment samples were collected by a local observer on a daily basis with additional samples collected during high runoff periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (water years 1972-76, 1978-79): Maximum, 2,540 micromhos Nov. 22, 1974; minimum, 400 micromhos July 27, 1976.
WATER TEMPERATURES (water years 1972-76, 1978-79): Maximum, 34.0°C July 18, 1974; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,760 mg/L May 8, 1973; minimum daily mean, 3 mg/L Feb. 4, 1972, Mar. 1-9, 1978.
SEDIMENT LOADS: Maximum daily, 12,500 tons (11,300 metric tons) May 8, 1973; minimum daily, 0.06 ton (0.05 metric ton) Feb. 4, 1972.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,060 micromhos July 4; minimum, 502 micromhos July 25.
WATER TEMPERATURES: Maximum, 30.0°C Aug. 6; minimum, 0.0°C on many days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,950 mg/L Apr. 11; minimum daily mean, 6 mg/L Nov. 20.
SEDIMENT LOADS: Maximum daily, 2,350 tons (2,130 metric tons) Mar. 19; minimum daily, 0.19 ton (0.17 metric ton) Nov. 20.

REVISIONS.--Revised figures of specific conductance and temperature for the water year 1974, superseding those published in the report for 1974, are given herein.

EXTREMES.--1973-74:
Specific conductance: Maximum recorded, 2,220 micromhos Sept. 7, 8; minimum recorded, 464 micromhos June 22.
Water temperatures: Maximum recorded, 34.0°C July 18; minimum recorded, 0.0°C Dec. 10, 17.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1170	1040	555	531	1020	964	---	---				
2	1180	1140	555	538	1030	984	---	---				
3	---	---	573	543	1020	1000	---	---				
4	---	---	550	531	1010	716	1300	1110				
5	---	---	529	492	787	712	1140	964				
6	---	---	---	---	847	790	1000	933				
7	---	---	1360	1320	872	830	1030	900				
8	---	---	1760	1330	869	838	---	---				
9	---	---	1840	1360	988	853	---	---				
10	---	---	1450	1380	984	872	---	---				
11	---	---	1460	1410	933	888	---	---				
12	---	---	1450	1350	937	904	---	---				
13	---	---	1360	1300	937	810	---	---				
14	---	---	1300	1240	838	802	---	---				
15	---	---	1260	1250	869	827	---	---				
16	---	---	1280	1250	1210	866	---	---				
17	1220	843	1290	1240	1150	908	---	---				
18	838	765	1260	1220	1050	926	---	---				
19	765	740	1260	1210	944	911	---	---				
20	744	716	1230	988	1260	922	---	---				
21	814	701	976	933	---	972	---	---				
22	824	694	1030	952	1280	972	---	---				
23	732	712	1040	1010	---	---	---	---				
24	732	709	1040	1020	---	---	---	---				
25	728	709	1050	1010	---	---	---	---				
26	990	637	1050	1010	---	---	---	---				
27	892	728	1020	976	---	---	---	---				
28	769	669	997	941	---	---	---	---				
29	705	666	968	922	---	---	---	---				
30	709	656	1000	952	---	---	---	---				
31	659	536	---	---	---	---	---	---				
MONTH	---	---	1840	492	---	---	---	---				

05570370 BIG CREEK NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	1460	1390	1110	1060	1650	1380	1880	1770	1810	1450
2	---	---	1440	1400	---	---	1600	1440	1860	1720	1820	1430
3	---	---	1400	1320	---	---	1670	1480	1840	1580	1860	1540
4	---	---	1350	1310	---	---	1670	1600	1820	1510	1820	1560
5	---	---	1360	1320	---	---	1600	1500	2020	1820	2130	1730
6	---	---	1480	1360	1090	960	1580	1480	2050	1890	2020	1970
7	---	---	---	---	1140	1120	1580	1460	1960	1910	2220	1990
8	---	---	---	---	---	---	1580	1480	1960	1890	2220	1970
9	---	---	---	---	1350	---	---	1480	1930	1080	1980	1830
10	---	---	---	---	1660	---	---	1310	1520	1200	1930	1900
11	---	---	---	---	1780	---	---	1330	1530	1470	1930	1900
12	---	---	---	---	1820	---	---	1400	1590	1550	1930	1890
13	---	---	---	---	1920	---	---	1290	1650	1310	1950	1850
14	---	---	---	---	1960	---	---	1380	1650	1630	1960	1800
15	---	---	---	---	1740	---	---	1480	1670	1650	1970	1800
16	1280	1210	---	---	1890	---	---	1440	1680	1670	1860	1790
17	1330	1260	---	---	1900	---	---	1520	1700	1640	1810	1770
18	1350	1300	---	---	1820	---	---	1190	1670	1390	1810	1740
19	1370	1320	---	---	1840	---	---	1070	1610	1560	1750	1700
20	1430	1360	---	---	1150	601	1130	1070	1630	1570	1780	1750
21	1420	1400	---	---	790	471	---	---	1580	1020	1860	1760
22	1440	1400	---	---	629	464	---	---	1610	1580	1900	1500
23	1520	1430	---	---	1130	601	---	---	1660	1620	1870	1760
24	1550	1350	---	---	1380	1170	---	---	1650	1620	1830	1800
25	1500	1410	---	---	1250	1020	---	---	1670	1520	1810	1780
26	1500	1440	---	---	1540	994	---	---	1670	1640	1790	1750
27	1520	1480	---	---	1560	1350	---	---	1700	1680	1800	1760
28	1510	1390	---	---	1600	1520	---	---	1700	1420	1820	1700
29	1400	1120	---	---	1650	1580	---	---	1690	1640	1750	1590
30	1390	1230	---	---	1640	1520	---	---	1780	1720	1590	1500
31	---	---	1190	1060	---	---	1750	1710	1810	1740	---	---
MONTH	---	---	---	---	1960	---	---	---	2050	1020	2220	1430
YEAR	2220	464										

05570370 BIG CREEK NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	17.0	11.0	9.5	6.5	5.0	---	---				
2	17.5	17.0	10.5	9.0	8.0	5.0	---	---				
3	---	---	10.0	8.0	9.5	7.0	---	---				
4	---	---	9.0	7.5	10.0	8.5	---	---				
5	---	---	7.0	6.0	8.5	6.5	---	---				
6	---	---	5.5	4.5	4.0	4.0	---	---				
7	---	---	8.0	6.0	3.5	2.5	---	---				
8	---	---	8.5	6.0	3.5	2.0	---	---				
9	---	---	5.5	4.5	4.0	3.5	---	---				
10	---	---	4.5	3.0	---	.0	---	---				
11	---	---	5.0	4.0	2.0	.5	---	---				
12	---	---	7.5	4.0	4.5	2.0	---	---				
13	---	---	9.0	6.5	4.0	3.5	---	---				
14	---	---	11.0	8.5	3.0	2.5	---	---				
15	---	---	11.5	9.5	3.5	2.5	---	---				
16	---	---	9.0	6.5	---	---	---	---				
17	14.0	12.5	8.5	6.0	---	.0	---	---				
18	14.5	12.5	10.5	8.0	2.0	1.5	---	---				
19	16.0	12.5	9.0	7.0	---	---	---	---				
20	15.0	13.0	11.0	9.0	---	---	---	---				
21	14.5	12.5	11.0	8.5	---	---	---	---				
22	14.5	12.0	9.0	7.0	---	---	---	---				
23	15.5	13.0	9.0	7.0	---	---	---	---				
24	16.5	14.0	10.5	8.5	---	---	---	---				
25	16.5	14.0	10.0	8.0	---	---	---	---				
26	14.5	12.5	9.0	7.5	---	---	---	---				
27	13.5	11.5	10.0	9.0	---	---	4.0	3.5				
28	11.5	10.5	9.0	6.5	---	---	4.0	4.0				
29	10.5	9.5	8.0	5.0	---	---	6.0	4.0				
30	11.0	9.0	7.0	5.0	---	---	6.0	4.0				
31	11.0	10.5	---	---	---	---	3.0	2.5				
MONTH	---	---	11.5	3.0	---	---	---	---				
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	18.5	13.5	19.5	16.0	24.0	21.0	21.0	19.5	20.5	16.5
2	---	---	16.5	15.5	20.5	17.0	25.5	22.5	20.0	19.0	17.0	13.0
3	---	---	18.5	14.0	21.5	18.0	26.5	23.5	19.0	17.5	13.5	12.0
4	---	---	17.0	14.0	22.0	18.5	24.5	23.0	18.0	17.0	13.5	10.5
5	---	---	17.5	13.5	20.5	20.0	24.0	21.0	19.5	15.5	18.0	11.5
6	---	---	17.5	12.5	20.5	20.0	24.5	20.5	20.0	17.0	16.0	12.5
7	---	---	13.5	11.0	20.0	19.5	25.5	21.5	19.5	17.5	18.0	15.0
8	---	---	11.5	10.5	21.5	20.0	26.5	23.0	21.0	17.5	18.5	15.5
9	---	---	11.5	10.0	23.0	21.5	27.5	24.0	21.5	19.5	19.5	16.5
10	---	---	14.0	10.0	22.0	19.5	30.5	24.5	21.5	20.0	21.5	19.0
11	---	---	16.0	13.5	20.0	18.0	25.0	24.0	22.5	20.0	21.5	19.5
12	---	---	16.0	13.5	20.5	17.5	27.0	23.0	22.5	19.5	22.0	19.5
13	---	---	15.5	12.0	21.5	18.0	32.5	22.5	26.5	21.0	19.0	16.0
14	---	---	15.5	14.5	23.0	20.0	33.0	23.0	23.5	20.0	16.0	13.5
15	---	---	17.0	13.5	23.0	20.5	29.0	20.0	23.5	21.0	16.5	13.0
16	15.5	12.5	20.5	16.0	20.5	17.5	28.0	16.5	23.0	21.0	18.0	15.0
17	17.0	11.5	19.5	18.5	19.5	16.5	30.0	16.5	22.5	18.5	19.0	16.0
18	16.5	13.0	18.5	17.0	21.5	17.0	34.0	20.0	23.0	18.5	19.5	17.5
19	16.5	13.5	18.0	16.0	23.5	20.5	31.0	23.0	23.0	19.5	19.5	17.0
20	19.0	13.5	20.5	17.0	23.0	22.0	33.0	23.0	23.5	20.0	18.5	17.0
21	18.0	16.5	21.5	19.5	21.5	20.0	---	---	---	---	17.0	15.0
22	19.0	15.0	21.5	20.0	21.0	17.5	---	---	23.5	21.0	14.5	12.5
23	15.5	12.0	20.5	18.5	19.0	16.5	---	---	22.5	20.0	13.5	10.5
24	16.0	9.5	19.5	16.5	18.5	17.0	---	---	21.5	18.0	13.5	10.0
25	17.0	12.5	18.0	16.0	19.5	17.0	---	---	21.0	16.5	15.0	11.5
26	20.0	13.5	17.0	16.0	21.0	17.0	---	---	22.5	19.0	15.5	12.0
27	19.5	17.0	18.0	16.0	22.0	18.5	---	---	22.0	21.0	16.0	14.0
28	19.5	17.5	17.0	17.0	22.5	19.5	---	---	21.0	17.5	16.0	14.5
29	18.5	17.0	19.0	17.0	22.5	20.0	---	---	19.5	16.0	15.0	13.5
30	17.5	15.5	19.5	18.0	24.0	21.5	---	---	20.0	16.5	13.5	11.0
31	---	---	18.0	17.0	---	---	23.5	22.5	---	18.5	---	---
MONTH	---	---	21.5	10.0	24.0	16.0	- -	---	26.5	15.5	22.0	10.0
YEAR	34.0	0										

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (COOE NUMBER) (00028)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-OUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)
OCT												
04...	1600	80010	80010	12	1360	7.9	15.0	16.0	9.6	--	--	--
NOV												
15...	1130	80010	80010	9.6	1280	8.1	3.0	6.0	14.0	--	--	--
DEC												
28...	1030	80010	80010	10	1590	7.4	-.5	.0	16.2	--	--	--
JAN												
22...	1610	80010	--	15	--	--	--	.0	--	--	--	--
FEB												
28...	1145	80010	80010	51	1340	8.0	1.0	.5	13.2	--	--	--
MAR												
21...	0945	80010	80010	136	940	7.4	3.5	6.5	10.4	--	--	--
APR												
23...	1105	80010	80010	57	1540	8.3	23.0	14.0	10.8	--	--	--
MAY												
31...	1030	80010	17002	33	1460	8.0	25.0	21.0	7.9	26	K1600	--
JUN												
13...	1300	80010	17002	30	1550	--	33.5	22.0	9.0	15	1400	--
26...	1315	80010	17002	9.0	1860	8.4	30.0	21.5	10.6	15	360	--
JUL												
18...	1030	80010	80010	5.5	1490	8.2	23.0	19.5	--	--	--	.0
25...	0930	80010	17002	105	710	7.4	25.5	22.5	5.3	--	--	--
AUG												
02...	1045	80010	80010	17	1510	8.1	29.5	22.5	--	--	--	.0
08...	0800	80010	17002	15	1590	7.8	30.0	26.0	6.4	12	300	--
SEP												
21...	1000	80010	17002	7.0	1550	8.1	18.0	15.5	9.5	14	520	--
27...	1400	80010	80010	4.7	1780	8.1	26.5	16.5	10.8	--	--	--

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITRO-GEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)
MAY												
31...	.0	236	--	511	--	162	19	2.0	--	--	--	--
JUN												
13...	.0	259	--	941	--	49	4	.00	--	--	--	--
26...	.0	254	--	752	--	17	6	1.6	--	--	--	--
JUL												
18...	.0	120	--	280	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	2300	--	2.1	--	1.2	--	--
AUG												
02...	.0	220	3.4	610	--	--	--	--	--	--	--	--
08...	--	--	--	847	9.0	18	3	7.5	--	.00	--	--
SEP												
21...	.0	260	--	679	--	15	3	2.1	--	--	--	--
27...	--	--	--	--	--	--	--	--	1.6	--	45	2800

DATE	NITRO-GEN, TOT IN BOT-TOM MA-TERIAL (MG/KG AS N) (00603)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
MAY												
31...	--	--	--	--	--	--	--	--	2900	--	--	--
JUN												
13...	--	--	--	--	--	--	--	--	900	--	--	--
26...	--	--	--	--	--	--	--	--	390	--	--	--
JUL												
18...	--	--	--	--	--	--	--	--	1600	500	1100	--
AUG												
02...	--	--	--	0	<10	<10	<10	10	1900	1900	50	24000
08...	--	.06	--	--	--	--	--	--	--	--	--	--
SEP												
21...	--	--	--	--	--	--	--	--	300	--	--	--
27...	2800	--	550	0	<10	<10	10	<10	--	--	--	16000

K Results based on colony count outside the acceptable range (non-ideal colony count).

05570370 BIG CREEK NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT												
04...	--	--	--	--	--	--	--	--	--	--	--	6.7
NOV												
15...	--	--	--	--	--	--	--	--	--	--	--	5.3
DEC												
28...	--	--	--	--	--	--	--	--	--	--	--	5.1
FEB												
28...	--	--	--	--	--	--	--	--	--	--	--	3.8
MAR												
21...	--	--	--	--	--	--	--	--	--	--	--	6.5
APR												
23...	--	--	--	--	--	--	--	--	--	--	--	13
MAY												
31...	0	--	830	--	--	--	.1	--	--	40	--	5.4
JUN												
13...	0	--	380	--	--	--	.0	--	--	0	--	--
26...	0	--	330	--	--	--	.1	--	--	0	--	7.9
JUL												
18...	--	--	260	20	240	--	--	--	--	--	--	--
25...	200	--	7000	--	--	--	--	--	--	--	--	30
AUG												
02...	--	20	360	180	180	930	--	.00	0	--	80	--
08...	0	--	--	--	--	--	.0	--	--	--	--	14
SEP												
21...	0	--	360	--	--	--	.2	--	--	0	--	4.4
27...	--	10	--	--	--	1100	--	.00	0	--	70	--

DATE	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39519)	ALORIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39333)	CHLOR-OANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39351)	ODD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39363)	DOE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39368)	ODT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39373)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39571)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39399)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39413)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)
JUL												
18...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
02...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
27...	4	.0	3	.7	.3	.0	.2	1.7	.0	.0	.0	.3

DATE	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39343)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39531)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39541)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39787)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL											
18...	--	--	--	--	--	--	--	--	21	.31	97
AUG											
02...	--	--	--	--	--	--	--	--	91	4.2	99
SEP											
27...	.0	.0	.0	.0	.0	.0	0	.0	--	--	--

05570370 BIG CREEK NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1490	1430	1470	1670	1580	1620	1530	1510	1520	1560	1470	153
2	1500	1350	1460	1670	1610	1640	1540	1390	1520	---	---	--
3	1390	1270	1360	1680	1630	1660	1500	1360	1420	---	---	--
4	1430	1260	1320	1720	1610	1670	1400	1210	1310	---	---	--
5	1540	1430	1470	1730	1650	1700	1460	1370	1430	---	---	--
6	1640	1530	1580	1710	1520	1620	1490	1450	1480	---	---	--
7	1650	1610	1630	1600	1530	1550	1620	1460	1530	---	---	--
8	1660	1620	1640	1600	1460	1520	1540	1500	1520	---	---	--
9	1680	1580	1620	1580	1490	1540	---	---	---	---	---	--
10	1640	1490	1540	1630	1580	1600	---	---	---	---	---	--
11	1610	1550	1590	1630	1550	1600	---	---	---	---	---	--
12	1600	1550	1580	1670	1590	1630	---	---	---	---	---	--
13	1610	1520	1570	1630	1570	1600	1520	1480	1500	---	---	--
14	1610	1540	1570	1610	1560	1590	1530	1480	1510	---	---	--
15	1620	1550	1580	1600	1570	1580	1520	1470	1500	---	---	--
16	1630	1530	1600	1610	1570	1590	1510	1470	1490	---	---	--
17	1650	1590	1620	1610	1290	1390	1530	1510	1520	---	---	--
18	1670	1630	1650	1360	1210	1290	1530	1490	1510	---	---	--
19	1680	1640	1660	1510	1360	1440	1510	1460	1480	---	---	--
20	1700	1630	1670	1540	1510	1520	1460	1350	1410	---	---	--
21	1690	1560	1650	1560	1530	1540	1430	1290	1360	---	---	--
22	1730	1680	1700	1550	1490	1530	1430	1360	1390	---	---	--
23	1720	1590	1670	1500	1300	1390	1480	1350	1390	1690	1660	168
24	1640	1620	1630	1350	1210	1290	1460	1340	1420	1740	1600	167
25	1650	1590	1620	1430	1350	1380	1570	1350	1430	1710	1650	167
26	1600	1490	1550	1440	1430	1430	1620	1390	1460	1680	1650	1670
27	1590	1540	1560	1430	1390	1410	1590	1430	1510	1670	1630	1660
28	1620	1520	1570	1430	1350	1380	1590	1550	1570	1660	1620	1640
29	1600	1550	1580	1500	1420	1450	1570	1350	1490	1680	1610	1650
30	1620	1590	1610	1520	1490	1500	1560	1310	1390	1630	1590	1610
31	1640	1600	1620	---	---	---	1430	1270	1360	1620	1570	1610
MONTH	1730	1260	1580	1730	1210	1520	1620	1210	1460	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1				1410	1360	1390	1230	1190	1210	1500	1470	1480
2				1390	1340	1360	1220	1200	1210	1500	1360	1470
3				1340	847	1130	1290	1230	1260	1370	1290	1340
4				1020	826	913	1330	1300	1310	1450	1370	1400
5				1140	1020	1080	1400	1300	1340	1490	1450	1470
6				1160	1060	1120	1390	1330	1360	1500	1470	1490
7				1040	942	983	1410	1360	1390	1510	1480	1500
8				1140	1030	1090	1430	1380	1410	1510	1490	1500
9				1140	1120	1130	1420	1370	1390	1500	1400	1480
10				1180	1140	1160	1430	1360	1400	1490	1400	1440
11				1220	706	1050	1430	694	1120	1480	1430	1470
12				1250	1170	1210	1140	757	909	1480	1380	1430
13				1230	833	1070	1300	1170	1250	1510	1480	1490
14				978	858	918	1340	1300	1320	1520	1500	1510
15				1060	965	1020	1380	1340	1360	1510	1470	1490
16				1080	1020	1050	1420	1390	1400	1500	1470	1480
17				1040	988	1010	1450	1360	1410	1520	1470	1500
18				1010	714	947	1430	1390	1410	1530	1480	1510
19				760	614	665	1460	1420	1440	1580	1520	1550
20				910	757	849	1500	1470	1480	1620	1580	1600
21				970	903	938	1500	1480	1490	1650	1620	1640
22				1040	979	1010	1540	1490	1520	1630	1600	1610
23				1130	1040	1090	1550	1530	1540	1630	1600	1620
24				1130	1080	1110	1550	1540	1540	1630	1570	1620
25				1200	1140	1170	1540	1100	1460	1570	1530	1550
26				1250	1210	1230	1320	1040	1210	1570	1540	1560
27				1260	1190	1230	1400	1320	1370	1560	1500	1550
28				1240	1130	1200	1460	1390	1430	1560	1490	1530
29				1200	925	1080	1470	1450	1460	1570	1550	1560
30				1110	923	1010	1480	1450	1470	1600	1550	1570
31				1180	1100	1150	---	---	---	1560	1410	1500
MONTH				1410	614	1080	1550	694	1360	1650	1290	1510

05570370 BIG CREEK NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1510	1300	1430	1700	1680	1690	1660	1400	1520	1580	1490	1540
2	1550	1510	1530	1750	1680	1710	1610	1560	1590	1580	1510	1540
3	1590	1550	1580	1840	1750	1780	1590	1560	1580	1510	1470	1500
4	1620	1580	1600	2060	1660	1770	1560	1540	1560	1530	1450	1490
5	1650	1620	1630	1860	1750	1780	1610	1570	1580	1610	1490	1560
6	1630	1610	1620	1860	1800	1830	1640	1600	1610	1640	1560	1600
7	1630	1460	1570	1870	1840	1860	1640	1610	1620	1650	1590	1620
8	1560	1420	1530	1880	1860	1880	1630	1600	1620	1600	1530	1570
9	1580	1530	1560	1910	1850	1890	1600	1550	1560	1510	1450	1480
10	1590	1570	1580	1900	1870	1890	1590	1560	1580	1530	1440	1490
11	1590	1560	1570	1920	1870	1880	1600	1550	1580	1590	1510	1550
12	1660	1590	1630	1880	1810	1850	1640	1550	1600	1620	1560	1580
13	1600	1540	1570	1810	1690	1730	1670	1600	1650	1620	1580	1600
14	1540	1410	1490	1690	1220	1450	1710	1650	1680	1620	1560	1600
15	1590	1550	1570	1450	1370	1420	1730	1670	1700	1580	1510	1560
16	1630	1590	1610	1420	1260	1350	1730	1680	1700	1550	1490	1520
17	1660	1620	1640	1570	1420	1510	1680	1610	1640	1550	1480	1520
18	1680	1660	1670	1620	1570	1610	1670	1620	1640	1580	1500	1540
19	1700	1680	1690	1670	1610	1640	1660	1620	1640	1610	1530	1560
20	1690	1660	1680	1680	1620	1650	1650	1610	1630	1580	1480	1540
21	1670	1640	1650	1720	1650	1690	1620	1590	1610	1580	1540	1560
22	1700	1640	1680	1750	1680	1730	1620	1370	1510	1580	1530	1560
23	1710	1680	1700	1750	1680	1740	1380	1330	1360	1590	1560	1580
24	1780	1700	1730	1950	1740	1820	1410	1270	1350	1650	1570	1600
25	1830	1780	1810	1920	502	851	1510	1400	1470	1680	1610	1650
26	1840	1820	1830	1290	981	1180	1560	1500	1530	1790	1690	1730
27	1830	1790	1810	1350	1290	1330	1570	1540	1550	1800	1730	1760
28	1790	1710	1740	1430	626	1310	1620	1570	1600	1760	1710	1740
29	1730	1700	1720	1520	889	1310	1640	1590	1610	1750	1700	1730
30	1730	1690	1720	1550	1070	1390	1610	1550	1580	1730	1640	1690
31	---	---	---	1430	1180	1350	1580	1520	1550	---	---	---
MONTH	1840	1300	1640	2060	502	1610	1730	1270	1580	1800	1440	1590
YEAR	2060	502	1500									

05570370 BIG CREEK NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.0	15.5	11.5	9.5	10.5	5.0	2.0	3.5	.0	.0	.0
2	17.0	13.5	15.5	12.0	8.0	10.0	3.5	2.5	2.5	---	---	---
3	17.5	16.0	16.5	12.0	8.5	10.5	3.5	1.5	3.0	---	---	---
4	16.5	14.0	15.5	13.5	10.5	12.0	1.5	.0	1.0	---	---	---
5	16.0	13.5	14.5	14.0	11.0	12.5	2.5	.5	1.5	---	---	---
6	13.5	12.5	13.0	12.5	9.5	10.5	1.5	.0	.5	---	---	---
7	13.0	11.5	12.5	10.0	7.5	8.5	.0	.0	.0	---	---	---
8	12.0	9.0	10.5	9.0	6.0	7.5	.0	.0	.0	---	---	---
9	13.5	10.5	12.0	9.5	6.5	8.0	---	---	---	---	---	---
10	14.5	13.0	13.5	10.0	6.5	8.5	---	---	---	---	---	---
11	15.0	13.5	14.0	10.0	8.0	9.0	---	---	---	---	---	---
12	14.5	13.0	14.0	9.0	8.5	9.0	---	---	---	---	---	---
13	13.0	11.5	12.5	12.0	9.0	10.5	---	---	---	---	---	---
14	11.5	9.0	10.5	10.5	7.0	8.5	.0	.0	.0	---	---	---
15	11.5	8.5	9.5	7.0	6.0	6.0	.0	.0	.0	---	---	---
16	10.5	8.5	9.5	6.5	5.5	6.5	.0	.0	.0	---	---	---
17	10.0	7.0	8.5	7.5	6.5	7.0	.0	.0	.0	---	---	---
18	10.5	8.5	9.5	8.0	6.0	7.0	.5	.0	.0	---	---	---
19	11.0	8.5	9.5	6.0	4.5	5.5	.0	.0	.0	---	---	---
20	12.0	8.5	10.0	4.5	3.5	4.0	.5	.0	.0	---	---	---
21	13.0	9.5	11.0	3.5	3.0	3.0	.0	.0	.0	---	---	---
22	15.0	12.0	13.5	4.5	3.0	3.5	.5	.0	.0	---	---	---
23	13.5	10.5	12.0	5.5	4.5	5.0	.5	.0	.0	.0	.0	.0
24	11.0	8.0	9.5	5.0	4.0	4.5	.5	.0	.5	.0	.0	.0
25	12.0	9.5	11.0	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0
26	11.5	9.5	10.5	4.5	3.0	4.0	.0	.0	.0	.0	.0	.0
27	11.0	8.0	9.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
28	10.5	7.5	9.0	3.0	1.5	2.0	.0	.0	.0	.0	.0	.0
29	10.5	7.0	9.0	3.5	1.0	2.0	.0	.0	.0	.0	.0	.0
30	11.0	7.0	9.0	2.5	1.0	2.0	.0	.0	.0	.0	.0	.0
31	11.0	7.5	9.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	17.5	7.0	11.5	14.0	1.0	7.0	5.0	.0	.5	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	7.5	6.5	6.5	14.5	10.5	12.0
2	---	---	---	.5	.0	.5	6.5	5.5	6.0	15.0	12.0	13.5
3	---	---	---	.5	.0	.5	8.5	4.5	7.0	14.0	13.0	13.5
4	---	---	---	1.5	.5	1.0	8.0	7.0	7.5	14.5	12.0	13.0
5	---	---	---	2.5	1.0	1.5	10.0	6.0	7.5	17.0	11.0	14.0
6	---	---	---	3.5	.5	2.0	8.0	4.0	6.0	18.5	13.0	15.5
7	---	---	---	3.0	2.0	2.5	9.5	5.5	7.5	21.0	15.0	18.0
8	---	---	---	3.0	2.0	2.5	10.5	8.0	9.0	23.5	18.5	20.5
9	---	---	---	3.0	2.0	2.5	8.5	6.5	7.5	24.0	20.0	22.0
10	---	---	---	2.5	.5	1.5	10.0	6.0	7.5	24.0	20.5	22.0
11	---	---	---	2.5	.0	1.0	8.0	7.0	7.5	22.0	16.5	19.0
12	---	---	---	4.5	1.0	2.5	12.0	8.0	10.0	17.5	15.0	16.0
13	---	---	---	5.0	3.0	3.5	11.5	9.5	10.5	19.0	14.0	16.5
14	---	---	---	3.5	2.0	3.0	12.0	9.5	10.5	19.5	15.5	17.5
15	---	---	---	3.5	1.0	2.0	13.0	9.5	11.0	19.0	15.5	17.0
16	---	---	---	5.5	1.5	3.5	13.5	10.0	11.5	20.0	14.5	17.0
17	---	---	---	5.0	4.0	4.5	15.0	10.5	12.5	21.0	16.5	18.5
18	---	---	---	8.0	4.0	6.0	15.5	12.0	13.5	22.5	18.0	20.0
19	---	---	---	9.0	7.0	8.0	13.5	12.5	13.0	22.5	19.5	21.0
20	---	---	---	9.0	6.5	7.5	16.5	12.0	14.0	21.5	18.5	20.0
21	---	---	---	8.5	6.5	7.5	15.0	12.5	14.0	19.5	17.0	18.5
22	---	---	---	9.0	7.0	8.0	15.0	11.0	13.0	19.5	15.5	17.5
23	---	---	---	10.0	8.5	9.5	15.5	12.5	14.0	19.5	16.5	18.0
24	---	---	---	8.5	4.0	6.0	15.0	14.5	15.0	17.0	15.0	16.0
25	---	---	---	4.5	2.5	3.5	18.5	14.5	16.5	18.0	13.5	15.5
26	---	---	---	5.5	3.5	4.5	16.0	13.5	14.5	15.5	13.5	14.5
27	---	---	---	7.0	3.5	5.0	13.5	10.5	12.0	19.5	14.5	16.5
28	---	---	---	8.0	5.5	6.5	12.0	9.5	11.0	20.5	15.5	18.0
29	---	---	---	10.5	8.0	9.5	12.5	10.5	11.5	22.0	17.0	19.5
30	---	---	---	11.5	10.0	10.5	14.5	10.0	12.0	23.0	18.5	20.5
31	---	---	---	10.0	7.5	8.5	---	---	---	22.0	21.0	21.5
MONTH	---	---	---	11.5	.0	4.5	18.5	4.0	10.5	24.0	10.5	17.5

05570370 BIG CREEK NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	19.0	20.5	23.5	19.5	22.0	24.5	22.5	23.5	25.5	22.5	24.0
2	22.0	19.0	20.5	25.5	20.5	23.0	25.0	21.0	23.0	25.5	21.0	23.0
3	22.5	18.5	20.5	23.5	22.5	23.0	27.0	22.5	24.0	25.0	21.5	23.0
4	23.0	19.0	21.0	23.5	20.5	22.5	28.0	23.0	25.0	23.5	20.0	21.5
5	24.5	20.5	22.5	21.5	18.5	20.0	29.0	24.0	26.0	22.5	19.0	20.5
6	25.0	21.0	23.0	21.5	18.0	20.0	30.0	26.0	27.5	22.5	19.5	20.5
7	24.5	22.5	23.5	23.5	19.0	21.0	29.5	25.5	27.5	20.5	18.0	19.0
8	24.5	22.5	23.5	23.0	19.5	21.5	29.5	25.5	27.0	19.0	15.5	17.0
9	25.5	22.5	24.0	23.5	20.5	22.0	29.5	26.0	27.5	19.0	15.0	17.0
10	24.0	19.0	21.5	25.0	20.5	23.0	27.5	24.5	26.0	20.0	16.0	18.0
11	22.0	18.0	20.5	25.5	21.5	23.5	24.5	20.0	22.0	21.0	17.5	19.0
12	23.0	20.0	21.5	25.5	22.0	24.0	21.5	17.5	19.5	20.5	18.0	19.5
13	23.5	20.5	22.0	25.5	22.0	23.5	22.5	19.0	20.0	20.0	18.5	19.5
14	24.5	21.0	23.0	25.0	21.5	23.5	22.0	18.5	20.0	18.5	15.5	17.0
15	25.5	22.0	24.0	26.5	22.0	24.0	19.0	16.5	18.0	16.5	12.5	14.5
16	26.0	22.0	24.0	27.5	22.5	24.5	20.5	17.0	18.5	16.5	12.5	14.5
17	26.5	23.0	24.5	24.5	21.5	23.0	22.5	18.0	20.0	17.0	12.5	15.0
18	23.0	21.0	22.0	24.0	19.0	21.5	25.0	21.0	23.0	18.0	14.0	16.0
19	25.0	21.5	23.5	23.5	19.0	21.0	25.0	22.5	24.0	17.5	14.0	15.5
20	28.0	24.0	25.5	24.0	19.0	21.0	25.0	22.5	24.0	16.5	13.0	15.0
21	27.5	22.5	25.0	25.0	19.5	22.0	25.0	21.5	23.0	17.0	15.0	16.0
22	27.0	22.5	24.5	26.0	20.5	22.5	24.5	21.5	23.0	16.0	12.5	14.0
23	23.5	19.5	21.5	26.5	21.5	23.5	24.0	21.5	22.5	15.0	11.5	13.0
24	22.0	18.0	20.0	25.5	22.5	24.0	22.0	19.0	20.5	15.0	11.5	13.0
25	22.0	17.5	20.0	24.5	22.0	23.0	22.0	18.5	20.0	16.5	13.5	15.0
26	23.0	18.5	21.0	24.5	23.0	24.0	21.5	19.0	20.0	18.0	13.5	15.5
27	21.0	19.5	20.5	27.0	23.5	25.0	23.0	20.0	21.5	17.5	14.5	16.0
28	22.0	19.0	21.0	27.0	23.5	25.0	23.5	20.0	21.5	17.5	14.0	16.0
29	22.5	20.5	21.5	26.5	23.5	25.0	23.5	21.0	22.0	18.5	15.5	17.0
30	24.0	19.5	21.5	27.0	24.0	25.0	24.0	20.0	22.0	18.5	16.0	17.0
31	---	---	---	26.5	24.0	25.0	25.0	21.5	23.5	---	---	---
MONTH	28.0	17.5	22.5	27.5	18.0	23.0	30.0	16.5	23.0	25.5	11.5	17.5
YEAR	30.0	.0	13.5									

05570370 BIG CREEK NEAR BRYANT, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	14	40	1.5	9.0	18	.44	13	17	.60
2	12	41	1.3	9.5	18	.46	12	15	.49
3	20	122	6.6	9.7	18	.47	20	52	2.8
4	14	42	1.6	9.7	18	.47	15	25	1.0
5	12	36	1.2	9.7	18	.47	14	24	.91
6	12	35	1.1	14	40	1.5	14	27	1.0
7	11	34	1.0	14	15	.57	14	80	3.0
8	10	31	.84	11	10	.30	14	26	.98
9	9.5	31	.80	10	8	.22	13	20	.70
10	10	30	.81	10	10	.27	13	16	.56
11	11	29	.86	9.5	10	.26	20	17	.92
12	10	27	.73	8.8	10	.24	23	17	1.1
13	9.5	23	.59	10	10	.27	18	13	.63
14	9.5	21	.54	10	10	.27	15	10	.41
15	9.0	20	.49	9.5	10	.26	14	10	.38
16	9.2	19	.47	10	10	.27	13	8	.28
17	8.7	19	.45	29	175	14	12	8	.26
18	8.7	19	.45	17	68	3.1	12	8	.26
19	9.0	18	.44	13	15	.53	12	8	.26
20	9.0	18	.44	12	6	.19	14	10	.38
21	9.2	17	.42	12	8	.26	18	13	.63
22	8.5	16	.37	13	10	.35	16	17	.73
23	10	15	.41	22	50	3.0	17	15	.69
24	10	15	.41	17	18	.83	12	12	.39
25	11	15	.45	14	16	.60	11	12	.36
26	12	16	.52	14	16	.60	11	12	.36
27	10	17	.46	18	18	.87	11	13	.39
28	9.7	17	.45	16	18	.78	10	15	.41
29	9.2	18	.45	14	19	.72	12	16	.52
30	9.2	18	.45	13	19	.67	25	18	1.2
31	9.5	18	.46	---	---	---	28	50	3.4
TOTAL	324.4	---	27.06	388.4	---	33.24	466	---	26.40
		JANUARY			FEBRUARY			MARCH	
1	52	100	14	12	10	.32	65	160	28
2	45	30	3.6	12	10	.32	120	170	55
3	28	20	1.5	12	10	.32	208	203	114
4	24	10	.65	12	10	.32	378	554	565
5	22	10	.59	12	10	.32	192	322	167
6	21	10	.57	12	10	.32	151	309	126
7	20	10	.54	12	10	.32	206	374	208
8	18	10	.49	12	10	.32	152	200	82
9	17	10	.46	12	10	.32	143	175	68
10	16	10	.43	12	10	.32	121	170	56
11	16	10	.43	13	10	.35	99	200	53
12	16	10	.43	13	10	.35	89	170	41
13	14	10	.38	13	10	.35	162	240	105
14	14	10	.38	13	10	.35	217	120	70
15	14	10	.38	13	10	.35	135	170	62
16	14	10	.38	14	10	.38	113	170	52
17	14	10	.38	13	10	.35	116	130	41
18	15	10	.41	12	10	.32	153	1140	471
19	16	20	.86	12	10	.32	583	1490	2350
20	17	50	2.3	16	10	.43	223	1180	710
21	16	20	.86	50	50	6.8	148	340	136
22	15	10	.41	71	75	14	114	210	65
23	16	10	.43	132	94	34	103	170	47
24	14	10	.38	188	100	51	98	160	42
25	13	10	.35	129	50	17	93	150	38
26	14	10	.38	93	40	10	81	150	33
27	14	10	.38	74	40	8.0	81	194	42
28	14	10	.38	55	40	5.9	111	509	153
29	13	10	.35	---	---	---	230	1030	640
30	12	10	.32	---	---	---	198	620	331
31	12	10	.32	---	---	---	150	920	373
TOTAL	566	---	33.72	1044	---	153.45	5033	---	7324

05570370 BIG CREEK NEAR BRYANT, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	121	290	95	56	140	21	25	224	15
2	130	220	77	66	230	41	25	223	15
3	106	190	54	70	160	30	20	222	12
4	101	190	52	55	120	18	17	220	10
5	83	180	40	45	130	16	17	218	10
6	71	170	33	45	140	17	15	216	8.7
7	66	170	30	45	140	17	20	213	12
8	62	160	27	45	150	18	18	208	10
9	59	170	27	45	150	18	18	205	10
10	60	170	28	45	145	18	18	194	9.4
11	250	1950	1320	60	136	22	16	189	8.2
12	700	1640	3100	50	126	17	16	182	7.9
13	220	480	285	45	121	15	25	172	12
14	130	310	109	40	114	12	20	160	8.6
15	100	260	70	40	107	12	15	144	5.8
16	90	220	53	35	102	9.6	15	125	5.1
17	90	180	44	35	96	9.1	12	103	3.3
18	80	150	32	30	89	7.2	12	84	2.7
19	75	150	30	30	84	6.8	12	66	2.1
20	75	140	28	25	82	5.5	10	52	1.4
21	70	130	25	30	79	6.4	10	41	1.1
22	64	140	24	30	77	6.2	9.0	34	.83
23	57	140	22	25	71	4.8	9.0	39	.95
24	56	150	23	25	70	4.7	9.0	76	1.8
25	60	753	122	25	70	4.7	9.0	106	2.6
26	126	1090	371	30	70	5.7	9.0	86	2.1
27	92	300	75	30	75	6.1	10	68	1.8
28	74	190	38	30	70	5.7	10	49	1.3
29	67	170	31	25	71	4.8	10	40	1.1
30	60	150	24	25	87	5.9	9.0	38	.92
31	---	---	---	30	207	17	---	---	---
TOTAL	3395	---	6289	1212	---	402.2	440.0	---	183.70
		JULY			AUGUST			SEPTEMBER	
1	9.0	39	.95	21	101	5.7	8.0	27	.58
2	8.0	44	.95	17	99	4.5	8.0	25	.54
3	8.0	66	1.4	16	87	3.9	8.0	25	.54
4	9.0	78	1.9	16	68	2.9	8.0	24	.52
5	9.0	72	1.7	15	53	2.1	7.0	24	.45
6	9.0	61	1.5	13	43	1.5	7.0	24	.45
7	8.0	51	1.1	12	39	1.3	9.0	24	.58
8	8.0	43	.93	14	37	1.4	8.0	25	.54
9	7.0	38	.72	13	34	1.2	8.0	26	.56
10	6.0	42	.68	12	30	.97	8.0	26	.56
11	6.0	46	.75	9.0	27	.66	8.0	25	.54
12	6.0	48	.78	8.0	24	.52	7.0	25	.47
13	7.0	49	.93	6.5	22	.39	6.0	25	.41
14	12	50	1.6	6.5	20	.35	7.0	25	.47
15	8.0	50	1.1	7.0	18	.34	8.0	27	.58
16	7.0	50	.95	7.0	18	.34	9.0	28	.68
17	6.1	49	.81	7.0	18	.34	9.0	27	.66
18	5.5	48	.71	7.0	21	.40	8.0	26	.56
19	5.5	49	.73	7.0	28	.53	8.0	23	.50
20	5.0	50	.68	7.0	37	.70	7.0	19	.36
21	5.0	51	.69	7.0	43	.81	7.0	16	.30
22	5.0	51	.69	12	83	2.7	7.0	17	.32
23	5.0	50	.68	9.0	46	1.1	7.0	19	.36
24	5.0	95	1.3	7.5	43	.87	8.0	20	.43
25	105	1700	482	6.5	40	.70	8.0	21	.45
26	45	460	56	6.0	37	.60	5.5	22	.33
27	28	210	16	6.0	34	.55	4.9	22	.29
28	24	170	11	7.0	33	.62	5.5	20	.30
29	22	150	8.9	9.0	31	.75	5.9	18	.29
30	20	135	7.3	11	29	.86	5.5	16	.24
31	25	120	8.1	12	28	.91	---	---	---
TOTAL	438.1	---	613.53	314.0	---	40.41	220.3	---	13.86
YEAR	13843.2		15140.57						

05570380 SLUG RUN NEAR BRYANT, IL

LOCATION.--Lat 40°28'24", long 90°08'37", in SE¼NE¼ sec.27, T.6 N., R.3 E., Fulton County, Hydrologic Unit 07130005, on left bank at upstream side of concrete ford on private road, 1.3 mi (2.1 km) upstream from mouth and 2.5 mi (4.0 km) northwest of Bryant.

DRAINAGE AREA.--7.9 mi^2 (20.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 523.25 ft (159.487 m) National Geodetic Vertical Datum of 1929 (Metropolitan Sanitary District of Greater Chicago bench mark).

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Jan. 26 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 276 ft^3/s (7.82 m^3/s) Apr. 11, 1979, gage height, 6.02 ft (1.835 m); minimum daily, 0.22 ft^3/s (0.006 m^3/s) Feb. 1-10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 276 ft^3/s (7.82 m^3/s) Apr. 11, gage height, 6.02 ft (1.835 m); minimum daily, 0.54 ft^3/s (0.015 m^3/s) July 12, Sept. 16, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	2.2	4.5	8.1	1.9	9.0	18	8.8	4.9	1.2	8.4	.76
2	4.0	1.8	3.7	6.2	2.0	11	19	9.0	4.7	1.5	5.5	.76
3	5.6	1.5	5.7	4.7	2.1	17	17	10	4.1	1.3	4.1	.76
4	3.1	1.4	4.0	1.2	2.1	24	16	9.6	3.4	1.7	3.6	.76
5	3.9	1.4	3.4	3.9	2.1	17	14	9.3	3.1	1.2	3.2	.76
6	3.5	2.5	2.5	3.8	2.1	14	11	9.3	2.8	.98	2.6	.80
7	3.5	2.5	6.7	3.7	2.1	17	13	9.3	6.5	.89	2.4	.76
8	3.5	2.1	2.6	3.7	2.1	17	14	9.6	8.4	.78	2.0	.67
9	3.5	1.9	2.8	3.6	2.1	16	13	9.6	6.1	.76	2.0	.64
10	3.9	1.7	2.8	3.6	2.1	17	11	9.8	5.4	.72	1.9	.64
11	5.4	1.6	2.0	3.4	2.1	18	64	11	4.3	.64	1.6	.64
12	5.4	1.4	2.0	3.3	2.1	17	58	10	3.5	.54	1.3	.64
13	4.9	1.6	1.9	3.1	2.0	18	31	9.7	3.9	.60	1.3	.64
14	4.9	1.6	2.5	2.9	1.9	18	25	9.2	3.2	2.7	1.2	.64
15	4.9	1.4	1.6	2.8	1.9	16	21	8.7	2.5	1.9	1.1	.58
16	3.5	1.4	1.6	2.7	1.9	16	17	9.5	1.6	1.4	.97	.54
17	3.5	5.4	1.7	2.7	1.9	14	14	10	1.4	1.1	.84	.63
18	3.5	3.4	1.6	2.6	1.9	20	12	9.7	1.2	.94	.92	.78
19	3.8	2.3	1.7	2.5	1.9	50	9.9	9.1	2.1	.89	.92	.95
20	3.5	1.9	2.0	2.5	2.0	25	12	9.2	3.5	.84	.89	.95
21	3.5	1.6	2.4	2.5	2.1	15	9.3	8.5	3.3	.76	.96	.78
22	3.3	1.7	3.1	2.4	2.2	11	6.9	9.3	8.4	.76	1.4	.60
23	3.1	2.7	2.8	2.3	2.5	9.6	8.7	7.1	7.4	.76	1.6	.54
24	6.2	2.2	2.5	2.3	13	7.1	6.9	5.8	4.9	1.0	1.4	.56
25	5.8	2.0	2.3	2.2	18	6.9	13	4.6	3.1	14	1.4	.59
26	4.3	1.9	2.1	2.2	14	6.9	23	4.6	5.9	5.9	1.2	.60
27	4.2	2.9	1.9	2.1	10	7.4	13	5.6	1.3	5.1	1.1	.68
28	3.0	3.6	1.8	2.1	7.5	11	12	4.8	1.3	6.4	.91	.68
29	3.8	5.5	3.0	2.0	---	20	11	4.0	1.3	11	.89	.63
30	2.9	5.2	5.1	2.0	---	20	9.5	3.6	1.4	7.8	.87	.83
31	2.6	---	10	1.9	---	17	---	4.9	---	13	.76	---
TOTAL	124.8	70.3	94.3	95.0	109.6	502.9	523.2	253.2	114.9	89.06	59.23	20.79
MEAN	4.03	2.34	3.04	3.06	3.91	16.2	17.4	8.17	3.83	2.87	1.91	.69
MAX	6.2	5.5	10	8.1	18	50	64	11	8.4	14	8.4	.95
MIN	2.6	1.4	1.6	1.2	1.9	6.9	6.9	3.6	1.2	.54	.76	.54
CFSM	.51	.30	.39	.39	.50	2.05	2.20	1.03	.49	.36	.24	.09
IN.	.59	.33	.44	.45	.52	2.37	2.46	1.19	.54	.42	.28	.10

CAL YR 1978 TOTAL 2030.23 MEAN 5.56 MAX 64 MIN .89 CFSM .70 IN 9.56
WTR YR 1979 TOTAL 2057.28 MEAN 5.64 MAX 64 MIN .54 CFSM .71 IN 9.69

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Specific conductance and water temperature recorder since July 1975. Sediment pumping sampler since March 1978.

REMARKS.--Temperature records missing from Aug. 18 to Sept. 6 due to monitor malfunction. Suspended-sediment samples were collected daily except during high runoff periods, when they were collected more frequently.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,640 micromhos Jan. 6, 1977; minimum, 488 micromhos July 23, 1975.
WATER TEMPERATURES: Maximum, 35.0°C July 15, 1977; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,150 mg/L Mar. 4, 1976; minimum daily mean, 5 mg/L Apr. 15, 1976.
SEDIMENT LOADS: Maximum daily, 181 tons (164 metric tons) May 6, 1977; minimum daily, 0.03 ton (0.027 metric ton) July 12, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,560 micromhos Sept. 11, 18; minimum, 650 micromhos Mar. 3.
WATER TEMPERATURES: Maximum, 34.5°C June 5; minimum, 0.0°C on many days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 800 mg/L Mar. 19; minimum daily mean, 10 mg/L Feb. 11-20.
SEDIMENT LOADS: Maximum daily, 108 tons (98 metric tons) Mar. 19; minimum daily, 0.03 ton (0.027 metric ton) July 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (JTU) (00070)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT												
04...	1210	80010	80010	3.9	1770	8.0	21.5	17.5	4	--	9.4	--
NOV												
15...	0930	80010	80010	1.4	2080	8.4	3.0	6.5	2	--	12.0	--
DEC												
28...	0900	80010	80010	1.9	2100	7.6	-.5	1.5	--	--	14.0	--
JAN												
09...	1245	80010	--	3.6	--	--	-10.0	.5	--	--	--	--
FEB												
28...	0945	80010	80010	7.6	1540	7.8	1.0	2.0	5	--	14.0	--
MAR												
21...	1130	80010	80010	15	990	8.0	15.5	7.9	15	--	10.8	--
APR												
23...	1430	80010	80010	6.9	1840	8.0	22.0	16.0	7	--	11.8	--
MAY												
31...	0915	80010	17002	4.9	2040	8.0	25.0	23.0	--	15	8.0	35
JUN												
13...	1400	80010	17002	4.9	2170	--	33.5	24.0	--	--	8.7	24
26...	1430	80010	17002	13	1910	8.2	30.0	25.0	--	45	7.6	27
JUL												
18...	0930	80010	80010	1.0	1900	7.9	23.0	20.5	--	--	--	--
25...	1230	80010	17002	14	1720	8.1	27.0	25.0	--	50	7.7	25
AUG												
02...	1130	80010	80010	5.5	1520	8.1	29.5	25.0	--	--	--	--
08...	1000	80010	17002	3.5	1970	8.2	28.0	27.0	--	--	7.3	30
SEP												
20...	1500	80010	17002	.96	2450	8.3	26.5	21.0	--	20	8.8	14

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS, NONCAR-BONATE (MG/L CACO3) (00902)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA) (00933)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT												
04...	--	1100	850	--	--	190	150	90	15	1.2	--	8.4
NOV												
15...	--	1100	820	--	--	190	160	85	14	1.1	--	6.8
FEB												
28...	--	800	540	--	--	140	110	80	18	1.2	--	7.4
MAR												
21...	--	520	300	--	--	100	66	23	9	.4	--	3.0
APR												
23...	--	890	600	--	--	160	120	80	16	1.2	--	6.7
MAY												
31...	840	1100	850	--	.0	200	150	81	14	1.1	--	6.6
JUN												
13...	--	--	--	--	.0	--	--	--	--	--	--	--
26...	490	980	--	--	.0	160	140	91	17	1.3	--	7.4
JUL												
18...	--	--	--	.0	.0	--	--	--	--	--	--	--
25...	--	870	870	--	.0	150	120	64	27	.9	72	7.5
AUG												
02...	--	--	--	.0	.0	--	--	--	--	--	--	--
08...	600	--	--	--	--	--	--	--	--	--	--	--
SEP												
20...	K2100	1100	--	--	.0	170	160	130	39	1.7	140	9.0

DATE	BICAR-BONATE (MG/L AS HCO3) (00440)	CAR-BONATE (MG/L AS CO3) (00445)	ALKA-LINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT												
04...	300	0	250	4.8	820	9.7	.2	5.3	1500	1420	2.04	17.4
NOV												
15...	380	0	310	2.4	940	11	.2	5.5	1720	1590	2.34	6.50
FEB												
28...	--	--	260	--	730	9.6	.2	4.5	1400	1240	1.90	28.7
MAR												
21...	--	--	160	--	380	5.1	.2	4.6	727	664	.99	29.4
APR												
23...	--	--	260	--	840	9.3	.2	3.0	1570	1390	2.14	29.2
MAY												
31...	--	--	270	--	940	9.0	.2	4.3	1680	--	2.28	22.2
JUN												
13...	--	--	243	--	515	--	--	--	--	--	--	--
26...	--	--	244	--	870	18	.2	3.2	1590	--	2.16	55.8
JUL												
18...	--	--	240	--	1100	--	--	--	--	--	--	--
25...	--	--	203	--	810	11	.2	5.8	1430	1170	1.94	54.1
AUG												
02...	--	--	230	3.6	820	--	--	--	--	--	--	--
08...	--	--	240	3.0	559	37	--	--	--	--	--	--
SEP												
20...	--	--	313	--	980	--	.2	5.6	1830	1470	2.49	4.74

K Results based on colony count outside the acceptable range (non-ideal colony count).

05570380 SLUG RUN NEAR BRYANT, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN, TOT IN BOTTOM MATERIAL (MG/KG AS N) (00603)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)
MAY												
31...	42	5	.00	--	--	--	--	--	--	--	--	--
JUN												
13...	213	24	2.0	--	--	--	--	--	--	--	--	--
26...	182	14	.00	--	--	--	--	--	--	--	--	--
JUL												
18...	--	--	--	--	--	--	--	--	--	--	--	--
25...	154	15	.60	1.0	--	8.8	860	861	--	410	0	<10
AUG												
02...	--	--	--	--	--	--	--	--	--	--	0	<10
08...	37	5	8.1	--	3.0	--	--	--	.54	--	--	--
SEP												
20...	43	4	.00	--	--	--	--	--	--	--	--	--

DATE	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAY												
31...	--	--	--	700	--	--	--	0	--	360	--	--
JUN												
13...	--	--	--	2300	--	--	--	0	--	700	--	--
26...	--	--	--	3100	--	--	--	0	--	740	--	--
JUL												
18...	--	--	--	350	290	60	--	--	--	400	30	370
25...	10	20	<10	2900	--	--	17000	0	30	660	--	--
AUG												
02...	10	20	10	1500	1500	50	27000	--	20	450	210	240
08...	--	--	--	--	--	--	--	0	--	--	--	--
SEP												
20...	--	--	--	600	--	--	--	0	--	310	--	--

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT										
04...	--	--	--	--	--	--	7.1	--	--	--
NOV										
15...	--	--	--	--	--	--	6.5	--	--	--
DEC										
28...	--	--	--	--	--	--	3.5	--	--	--
FEB										
28...	--	--	--	--	--	--	4.3	--	--	--
MAR										
21...	--	--	--	--	--	--	5.8	--	--	--
APR										
23...	--	--	--	--	--	--	5.8	--	--	--
MAY										
31...	--	.0	--	--	10	--	5.6	--	--	--
JUN										
13...	--	.1	--	--	0	--	--	--	--	--
26...	--	.1	--	--	20	--	8.6	--	--	--
JUL										
18...	--	--	--	--	--	--	--	38	.10	57
25...	1200	.0	.06	--	30	50	7.0	--	--	--
AUG										
02...	1200	--	.00	0	--	50	--	75	1.1	90
08...	--	.0	--	--	--	--	7.6	--	--	--
SEP										
20...	--	.1	--	--	0	--	3.4	--	--	--

05570380 SLUG RUN NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1930	1910	1930	2030	2000	2020	1840	1820	1830	2090	1870	1970
2	1940	1610	1870	2080	2010	2040	1840	1710	1830	2090	1930	2030
3	1940	1900	1920	2070	2020	2040	1800	1540	1760	2290	1870	2010
4	1910	1720	1830	2080	2040	2060	1800	1780	1800	2210	2000	2100
5	1760	1720	1740	2100	2070	2080	1840	1800	1820	2230	1950	2110
6	1770	1740	1760	2100	1910	2040	1900	1830	1860	2280	1950	2110
7	1750	1730	1750	2090	2060	2080	1890	1860	1870	2220	2020	2120
8	1760	1730	1750	2100	2060	2080	2010	1870	1890	2380	2070	2250
9	1770	1740	1750	2130	2100	2120	2000	1900	1950	2330	2020	2150
10	1790	1680	1760	2140	2100	2120	2010	1890	1960	2380	2060	2180
11	1800	1710	1760	2170	2130	2140	1990	1900	1940	2490	2080	2210
12	1760	1740	1750	2190	2140	2170	1980	1890	1940	2220	2080	2140
13	1780	1730	1750	2190	2140	2170	2000	1970	1990	2160	1980	2060
14	1770	1740	1760	2200	2150	2180	2030	1910	1970	2320	2080	2170
15	1770	1740	1760	2190	2060	2110	2000	1900	1950	2170	1910	2040
16	1780	1770	1770	2090	2020	2060	1990	1860	1940	2080	1940	2010
17	1810	1770	1800	2010	1180	1800	2020	1860	1950	2320	2040	2130
18	1840	1820	1830	1920	1880	1900	2070	1880	1970	2310	1980	2140
19	1980	1840	1940	1920	1900	1910	2120	1890	1980	2050	1940	2000
20	1960	1920	1940	1930	1900	1910	2080	1870	1930	2240	1940	2070
21	2000	1960	1980	2000	1930	1960	2080	1840	1920	2180	1930	2090
22	2050	1980	2000	2010	1600	1970	2030	1840	1920	2150	1970	2080
23	2090	1990	2050	1930	1650	1890	2080	1870	1930	2200	1970	2090
24	2030	1880	1930	1910	1890	1900	2080	1870	1970	2140	1980	2070
25	2030	1910	1940	1940	1900	1920	2050	1910	1970	2190	1990	2060
26	1970	1950	1960	1980	1760	1910	2190	1920	2030	2150	1920	2020
27	1970	1930	1950	1880	1860	1870	2150	1920	2030	2140	1960	2050
28	2020	1950	1980	1870	1830	1850	2220	1910	2080	2250	1990	2100
29	1990	1920	1950	1830	1810	1820	2140	1620	1930	2230	1940	2090
30	1990	1960	1980	1820	1810	1810	1930	1770	1850	2040	1900	1980
31	2020	1970	2000	---	---	---	2020	1770	1900	2160	1970	2060
MONTH	2090	1610	1870	2200	1180	2000	2220	1540	1920	2490	1870	2090
		FEBRUARY			MARCH			APRIL			MAY	
1	2130	1910	2000	1490	1340	1390	1590	1460	1520	1670	1580	1620
2	2030	1890	1960	1480	1320	1360	1560	1410	1490	1680	1570	1620
3	2090	1920	2000	1400	650	1130	1690	1530	1600	1640	1580	1600
4	2140	1910	2020	1190	1080	1120	1760	1610	1670	1660	1590	1620
5	2040	1900	2000	1170	1050	1110	1780	1620	1700	1680	1570	1640
6	2030	1940	1980	1210	1060	1150	1870	1670	1770	1710	1600	1650
7	2190	1950	2020	1290	1100	1160	1910	1710	1790	1720	1630	1680
8	2130	1930	2040	1340	1200	1280	1900	1710	1810	1730	1620	1660
9	2120	1910	2000	1370	1240	1310	1900	1780	1840	1740	1640	1670
10	2050	1920	2000	1420	1320	1370	1890	1760	1830	1820	1680	1740
11	2040	1900	1990	1400	1310	1350	1870	1020	1540	1790	1660	1730
12	2130	1930	2010	1390	1290	1340	1470	1140	1390	1810	1700	1740
13	2120	1880	2000	1360	1110	1250	1510	1400	1450	1800	1730	1770
14	2090	1890	2000	1280	1160	1220	1640	1500	1550	1850	1750	1800
15	1980	1870	1930	1310	1210	1260	1720	1570	1640	1860	1750	1810
16	2230	1880	2000	1320	1240	1290	1740	1610	1680	1900	1770	1830
17	2200	1870	2030	1320	1210	1260	1830	1660	1730	1940	1810	1880
18	2100	1870	1970	1280	786	1130	1850	1680	1770	2090	1840	1940
19	2080	1910	2000	961	665	896	1880	1710	1780	2100	1900	1970
20	2020	1800	1940	979	915	938	1830	1720	1770	2080	1910	1970
21	1840	1690	1770	1040	947	979	1900	1730	1780	2050	1910	1970
22	1760	1640	1710	1140	976	1060	1880	1760	1820	2070	1890	1970
23	1590	1290	1420	1200	1100	1150	1950	1790	1830	2020	1850	1930
24	1610	1390	1490	1390	1160	1280	1860	1750	1810	2030	1870	1940
25	1600	1460	1520	1530	1360	1430	1860	1060	1690	2040	1870	1920
26	1610	1490	1530	1620	1400	1510	1380	1260	1320	1990	1840	1920
27	1660	1510	1560	1590	1440	1520	1460	1350	1400	1950	1860	1890
28	1610	1420	1490	1580	1420	1510	1540	1460	1510	1980	1880	1930
29	---	---	---	1610	1110	1400	1580	1520	1550	2070	1920	2000
30	---	---	---	1490	1340	1390	1640	1560	1590	2140	1950	2010
31	---	---	---	1560	1390	1490	---	---	---	2130	1940	2000
MONTH	2230	1290	1870	1620	650	1260	1950	1020	1650	2140	1570	1820

05570380 SLUG RUN NEAR BRYANT, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	2240	1940	2090	1600	1460	1540	1710	1460	1570	---	---	---
2	2290	2020	2130	1620	1480	1530	1620	1480	1530	2340	2080	2210
3	2190	2070	2120	1600	1460	1530	1550	1460	1500	2280	2120	2220
4	2310	2090	2190	1560	1440	1490	1560	1460	1500	2410	2160	2260
5	2260	2100	2180	1610	1440	1530	1590	1480	1530	2330	2190	2230
6	2270	2060	2130	1640	1450	1520	1690	1490	1560	2380	2140	2270
7	2190	1700	2000	1570	1460	1510	1680	1510	1580	2370	2180	2280
8	2080	1820	1930	1630	1460	1530	1640	1560	1590	2350	2170	2260
9	2040	1850	1920	1620	1480	1540	1710	1580	1630	2470	2190	2330
10	2040	1820	1900	1610	1450	1520	1760	1600	1660	2490	2240	2340
11	2030	1830	1900	1540	1410	1480	1650	1590	1620	2560	2250	2430
12	2010	1810	1890	1610	1420	1500	1790	1620	1700	2520	2280	2410
13	1960	1800	1880	1580	1410	1490	1720	1650	1680	2410	2300	2360
14	1970	1790	1870	1530	1380	1420	1770	1670	1730	2500	2290	2380
15	1940	1750	1830	1480	1370	1410	1780	1590	1680	2470	2330	2410
16	1910	1740	1840	1510	1380	1450	1770	1650	1720	2490	2310	2400
17	1990	1790	1860	1530	1370	1450	1900	1730	1800	2440	2250	2340
18	2260	1780	1990	1490	1360	1430	2060	1690	1930	2560	2290	2380
19	2110	1850	1950	1460	1360	1420	1990	1730	1810	2470	2350	2390
20	1980	1810	1880	1480	1350	1410	2060	1830	1900	2490	2350	2410
21	2000	1750	1870	1540	1390	1440	2010	1850	1930	2080	1680	1950
22	1860	1580	1670	1510	1380	1450	2000	1850	1920	2060	1730	1880
23	1680	1550	1610	1500	1360	1420	2000	1890	1950	1950	1710	1850
24	1670	1560	1610	1480	1360	1420	1980	1920	1960	2120	1720	1860
25	1820	1560	1630	1830	1400	1650	2040	1900	1960	1930	1660	1810
26	1810	1440	1600	1610	1420	1530	2030	1930	1990	2050	1720	1830
27	1620	1440	1480	1570	1420	1500	2040	1920	2010	2060	1780	1890
28	1630	1430	1490	1790	936	1490	2140	1950	2040	2050	1660	1860
29	1640	1460	1530	1790	1560	1690	2170	2000	2080	1950	1710	1840
30	1600	1480	1540	1720	1150	1510	2260	2010	2110	2030	1830	1920
31	---	---	---	1680	1220	1410	2280	2080	2150	---	---	---
MONTH	2310	1430	1850	1830	936	1490	2280	1460	1780	2560	1660	2170
YEAR	2560	650	1810									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.0	14.5	16.0	13.5	9.5	11.0	5.5	2.5	3.5	.5	.5	.5
2	18.5	14.5	16.5	14.0	8.0	10.5	3.0	2.0	2.5	.5	.5	.5
3	18.0	16.0	16.5	14.0	8.5	11.0	3.5	.5	2.5	.5	.5	.5
4	18.5	14.5	16.0	15.5	10.5	12.5	2.5	.0	1.0	.5	.0	.5
5	16.5	14.5	15.5	15.0	10.5	12.5	4.0	1.0	2.0	.5	.5	.5
6	15.0	14.0	14.5	11.5	9.5	10.5	1.5	.0	1.0	.5	.0	.5
7	14.5	12.0	14.0	11.5	7.5	9.0	.0	.0	.0	1.0	.5	.5
8	15.0	11.0	13.0	11.5	6.5	8.5	.5	.0	.0	.5	.0	.5
9	16.0	12.0	14.0	12.0	7.0	9.0	.5	.0	.5	.5	.0	.5
10	15.5	14.0	14.5	12.0	6.5	9.0	.5	.0	.0	1.0	.0	.5
11	15.5	14.0	14.5	11.5	8.0	9.5	1.5	.5	.5	.5	.0	.5
12	16.0	13.5	14.5	10.0	8.5	9.0	1.5	.5	1.0	.5	.5	.5
13	15.0	12.5	13.5	13.0	9.5	11.0	2.0	.5	1.0	.5	.0	.5
14	13.5	10.5	12.0	9.5	6.0	7.5	2.0	.5	1.0	.5	.0	.5
15	14.0	10.5	12.0	7.5	6.5	7.0	3.5	1.0	2.0	.5	.0	.5
16	13.0	10.0	11.5	8.0	6.0	7.0	3.0	.5	1.5	.5	.0	.5
17	13.0	8.5	10.5	8.0	6.0	7.0	3.0	.0	1.5	.5	.5	.5
18	13.0	9.5	11.0	9.0	5.5	7.0	4.0	1.5	2.5	.5	.5	.5
19	13.5	8.5	11.0	6.0	4.0	5.0	3.0	1.5	2.5	.5	.5	.5
20	15.0	9.5	11.5	4.5	3.5	4.0	3.5	1.0	2.5	1.0	.5	.5
21	16.0	10.0	12.5	4.0	3.0	3.5	3.0	.5	1.5	1.0	.5	.5
22	16.0	12.5	14.0	5.0	3.0	4.0	4.0	1.0	2.0	1.0	.5	.5
23	13.0	9.5	12.0	6.0	4.0	5.0	4.0	.5	2.0	1.0	.5	1.0
24	13.5	9.0	11.0	6.0	3.0	4.0	3.0	.5	2.0	1.0	.5	.5
25	13.5	10.5	12.0	6.0	2.0	4.0	2.5	.5	1.0	.5	.5	.5
26	13.0	9.5	11.0	4.5	2.5	3.5	2.0	.5	1.0	1.0	.5	.5
27	14.0	9.5	11.0	4.0	2.5	3.0	1.0	.5	.5	1.0	.5	1.0
28	13.0	8.0	10.0	3.0	.5	1.5	2.5	.5	1.5	1.5	.5	1.0
29	13.0	9.0	10.5	4.0	1.5	2.0	3.0	.5	2.0	1.0	.5	.5
30	13.5	8.0	10.0	3.0	5	2.0	2.0	.5	1.5	1.5	.5	1.0
31	13.5	8.0	10.5	---	---	---	.5	.5	.5	1.0	.5	.5
MONTH	18.5	8.0	13.0	15.5	.5	7.0	5.5	.0	1.5	1.5	.0	.5
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	.5	3.0	2.0	2.5	8.5	7.5	8.0	16.0	12.5	14.0
2	1.0	.5	1.0	3.0	2.0	2.5	7.5	6.0	7.0	16.5	13.0	15.0
3	1.5	1.0	1.0	2.5	1.5	2.0	10.0	5.5	7.5	15.5	14.0	15.0
4	1.0	1.0	1.0	2.5	2.0	2.0	8.5	7.5	8.0	16.5	13.5	14.5
5	1.0	.5	1.0	3.0	2.0	2.0	11.0	5.0	8.0	18.0	13.0	15.0
6	1.0	.5	1.0	4.5	1.5	2.5	10.0	4.5	7.0	19.5	14.0	16.5
7	1.0	.5	1.0	3.0	2.5	2.5	10.0	6.5	8.0	24.0	15.5	19.0
8	1.0	1.0	1.0	3.0	2.0	2.5	11.0	8.0	9.0	29.0	18.5	23.0
9	1.0	.5	1.0	3.0	2.0	2.5	9.5	8.0	8.5	30.0	21.5	25.5
10	1.0	1.0	1.0	3.0	1.0	2.0	11.0	7.0	9.0	31.5	22.0	26.5
11	1.0	1.0	1.0	3.5	1.0	2.0	9.0	7.5	8.5	26.5	19.0	22.0
12	1.5	1.0	1.0	5.0	1.5	2.5	12.5	8.5	10.5	23.0	17.0	19.0
13	2.0	1.0	1.5	5.5	2.0	3.0	13.0	10.5	11.5	23.0	16.0	19.0
14	2.0	1.0	1.5	5.5	2.5	3.0	14.5	11.0	12.0	24.5	16.0	19.5
15	1.5	1.0	1.5	4.5	2.0	3.0	15.0	10.5	12.5	24.0	16.0	19.5
16	1.5	1.0	1.0	6.0	2.0	3.5	14.5	11.5	12.5	23.5	16.0	19.5
17	1.0	1.0	1.0	5.0	3.0	4.0	15.5	12.0	13.5	25.0	17.5	21.0
18	1.0	1.0	1.0	8.5	3.5	5.5	15.5	12.5	14.0	27.0	19.0	23.0
19	1.5	1.0	1.0	8.5	6.0	7.0	14.5	13.5	14.0	29.0	22.0	24.5
20	1.5	1.0	1.0	8.0	6.0	7.0	17.0	13.5	15.0	29.5	21.0	24.5
21	1.5	1.0	1.5	8.5	5.5	7.0	15.5	13.5	15.0	25.5	18.5	21.5
22	2.5	1.5	1.5	8.5	5.5	7.0	16.5	13.0	14.5	24.5	16.5	20.0
23	2.0	1.0	1.5	9.5	7.5	8.5	16.0	13.5	15.0	25.0	17.0	20.5
24	3.0	1.5	2.0	7.5	4.0	5.5	16.0	15.0	16.0	20.0	16.0	17.5
25	2.5	1.5	1.5	6.0	2.5	4.0	21.0	15.5	17.5	22.5	14.0	17.5
26	3.0	1.5	1.5	7.0	3.0	5.0	18.5	15.0	16.0	16.5	14.5	15.5
27	3.0	1.5	2.0	7.0	3.0	5.0	15.0	13.0	14.0	24.0	15.0	18.5
28	2.5	1.5	2.0	8.5	5.0	6.5	14.5	12.5	13.5	26.0	16.0	20.5
29	---	---	---	9.5	7.0	8.5	15.0	12.5	13.5	27.0	16.0	21.5
30	---	---	---	11.5	9.5	10.5	16.5	12.0	14.0	29.0	18.5	23.5
31	---	---	---	10.0	8.5	9.0	---	---	---	26.5	22.5	24.0
MONTH	3.0	.5	1.0	11.5	1.0	4.5	21.0	4.5	12.0	31.5	12.5	20.0

05570380 SLUG RUN NEAR BRYANT, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.0	18.5	22.5	28.5	18.0	23.0	23.5	19.0	21.5	---	---	---
2	26.5	19.5	22.0	32.0	20.0	24.5	24.0	17.5	21.0	---	---	---
3	29.5	17.5	23.0	28.0	24.0	25.5	25.5	18.5	21.5	---	---	---
4	29.5	19.0	23.5	27.5	23.0	24.5	27.0	19.5	22.5	---	---	---
5	34.5	20.0	26.0	23.5	17.5	20.5	28.0	19.0	24.0	---	---	---
6	33.5	21.0	26.0	22.5	15.5	19.5	29.5	21.5	25.0	---	---	---
7	30.5	23.0	26.5	24.5	17.5	21.0	28.0	20.5	24.5	26.5	20.0	23.0
8	31.5	25.0	28.5	26.0	17.5	21.5	28.0	20.5	24.5	25.5	19.5	21.5
9	34.0	26.0	29.5	26.0	19.5	22.5	27.0	20.0	23.5	26.5	19.0	22.0
10	30.0	20.0	25.0	30.5	20.0	24.0	22.5	18.0	21.0	27.0	19.5	23.0
11	29.0	18.5	23.5	31.0	20.0	25.5	20.0	13.0	16.5	27.0	20.0	23.0
12	28.0	20.5	23.5	32.5	22.0	26.0	19.0	11.5	14.5	26.5	20.0	22.5
13	28.5	21.0	24.0	29.0	22.0	25.5	20.0	11.5	15.5	23.0	17.5	21.5
14	31.0	21.5	26.0	30.5	23.5	26.0	15.0	11.0	13.5	23.0	12.0	18.5
15	33.0	22.5	26.5	33.0	23.5	27.5	14.0	10.0	12.0	21.0	12.0	17.5
16	33.0	22.0	26.5	32.5	24.0	27.5	16.0	10.5	12.5	23.0	15.0	18.0
17	33.5	23.0	27.0	28.5	22.5	25.0	19.0	10.5	13.0	21.0	15.0	17.5
18	27.5	20.0	23.5	26.5	19.0	22.5	---	---	---	23.5	15.0	19.0
19	32.0	21.5	27.0	25.0	18.0	21.5	---	---	---	23.5	16.0	19.5
20	34.0	26.0	30.0	25.5	19.5	22.0	---	---	---	---	---	---
21	33.5	24.0	29.0	27.0	20.0	23.0	---	---	---	20.0	13.0	15.0
22	34.0	28.0	30.5	29.0	21.5	24.0	---	---	---	19.0	11.5	14.0
23	32.5	24.5	27.5	28.5	22.0	25.0	---	---	---	18.0	8.5	12.5
24	27.0	21.5	24.0	29.5	23.5	26.0	---	---	---	18.5	9.0	13.0
25	25.5	19.5	22.5	27.5	23.5	25.0	---	---	---	18.5	11.5	14.5
26	26.5	19.0	23.0	25.5	22.5	24.0	---	---	---	19.0	10.5	14.0
27	23.0	19.0	21.5	28.5	22.5	25.0	---	---	---	18.5	11.0	14.0
28	25.0	18.5	21.5	28.5	22.0	24.5	---	---	---	19.5	9.5	13.5
29	25.0	21.5	23.0	26.5	22.0	24.0	---	---	---	20.0	12.5	15.0
30	28.0	18.5	22.5	27.5	22.5	24.5	---	---	---	18.5	12.5	15.0
31	---	---	---	27.0	21.0	24.5	---	---	---	---	---	---
MONTH	34.5	17.5	25.0	33.0	15.5	24.0	---	---	---	---	---	---
YEAR	34.5	.0	12.0									

05570380 SLUG RUN NEAR BRYANT, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	4.3	15	.17	2.2	140	.83	4.5	130	1.6
2	4.0	14	.15	1.8	130	.63	3.7	105	1.0
3	5.6	22	.33	1.5	120	.49	5.7	115	1.8
4	3.1	11	.09	1.4	120	.45	4.0	90	.97
5	3.9	15	.16	1.4	110	.42	3.4	80	.73
6	3.5	13	.12	2.5	250	1.7	2.5	64	.43
7	3.5	13	.12	2.5	180	1.2	6.7	120	2.2
8	3.5	13	.12	2.1	150	.85	2.6	45	.32
9	3.5	13	.12	1.9	120	.62	2.8	48	.36
10	3.9	30	.32	1.7	100	.46	2.8	48	.36
11	5.4	46	.67	1.6	80	.35	2.0	37	.20
12	5.4	44	.64	1.4	67	.25	2.0	35	.19
13	4.9	38	.50	1.6	55	.24	1.9	33	.17
14	4.9	35	.46	1.6	45	.19	2.5	44	.30
15	4.9	33	.44	1.4	32	.12	1.6	33	.14
16	3.5	32	.30	1.4	30	.11	1.6	31	.13
17	3.5	30	.28	5.4	240	3.5	1.7	33	.15
18	3.5	28	.26	3.4	150	1.4	1.6	31	.13
19	3.8	42	.43	2.3	90	.56	1.7	32	.15
20	3.5	40	.38	1.9	70	.36	2.0	37	.20
21	3.5	38	.36	1.6	60	.26	2.4	42	.27
22	3.3	36	.32	1.7	60	.28	3.1	52	.44
23	3.1	35	.29	2.7	78	.57	2.8	48	.36
24	6.2	95	1.6	2.2	68	.40	2.5	44	.30
25	5.8	84	1.3	2.0	64	.35	2.3	42	.26
26	4.3	72	.84	1.9	62	.32	2.1	39	.22
27	4.2	62	.70	2.9	82	.64	1.9	36	.18
28	3.0	58	.47	3.6	95	.92	1.8	34	.17
29	3.8	130	1.3	5.5	150	2.2	3.0	50	.41
30	2.9	100	.78	5.2	140	2.0	5.1	75	1.0
31	2.6	90	.63	---	---	---	10	100	2.7
TOTAL	124.8	---	14.65	70.3	---	22.67	94.3	---	17.84
		JANUARY			FEBRUARY			MARCH	
1	8.1	75	1.6	1.9	11	.06	9.0	50	1.2
2	6.2	50	.84	2.0	11	.06	11	92	2.7
3	4.7	40	.51	2.1	12	.07	17	140	6.4
4	1.2	20	.06	2.1	12	.07	24	190	12
5	3.9	23	.24	2.1	12	.07	17	170	7.8
6	3.8	22	.23	2.1	11	.06	14	130	4.9
7	3.7	21	.21	2.1	11	.06	17	200	9.2
8	3.7	21	.21	2.1	11	.06	17	180	8.3
9	3.6	20	.19	2.1	11	.06	16	160	6.9
10	3.6	20	.19	2.1	11	.06	17	190	8.7
11	3.4	19	.17	2.1	10	.06	18	200	9.7
12	3.3	19	.17	2.1	10	.06	17	170	7.8
13	3.1	18	.15	2.0	10	.05	18	180	8.7
14	2.9	17	.13	1.9	10	.05	18	160	7.8
15	2.8	16	.12	1.9	10	.05	16	140	6.0
16	2.7	15	.11	1.9	10	.05	16	120	5.2
17	2.7	15	.11	1.9	10	.05	14	100	3.8
18	2.6	15	.11	1.9	10	.05	20	550	30
19	2.5	14	.09	1.9	10	.05	50	800	108
20	2.5	14	.09	2.0	10	.05	25	600	40
21	2.5	14	.09	2.1	11	.06	15	480	19
22	2.4	14	.09	2.2	12	.07	11	410	12
23	2.3	13	.08	2.5	14	.09	9.6	350	9.1
24	2.3	13	.08	13	75	2.6	7.1	340	6.5
25	2.2	12	.07	18	100	4.9	6.9	330	6.1
26	2.2	12	.07	14	80	3.0	6.9	330	6.1
27	2.1	12	.07	10	57	1.5	7.4	350	7.0
28	2.1	12	.07	7.5	42	.85	11	410	12
29	2.0	11	.06	---	---	---	20	500	27
30	2.0	11	.06	---	---	---	20	420	23
31	1.9	11	.06	---	---	---	17	380	17
TOTAL	95.0	---	6.33	109.6	---	14.22	502.9	---	439.9

05570380 SLUG RUN NEAR BRYANT, IL--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	18	300	15	8.8	75	1.8	4.9	100	1.3
2	19	250	13	9.0	78	1.9	4.7	94	1.2
3	17	200	9.2	10	85	2.3	4.1	90	1.0
4	16	165	7.1	9.6	82	2.1	3.4	80	.73
5	14	145	5.5	9.3	79	2.0	3.1	74	.62
6	11	110	3.3	9.3	79	2.0	2.8	68	.51
7	13	90	3.2	9.3	79	2.0	6.5	130	2.3
8	14	80	3.0	9.6	82	2.1	8.4	150	3.4
9	13	75	2.6	9.6	82	2.1	6.1	120	2.0
10	11	70	2.1	9.8	83	2.2	5.4	110	1.6
11	64	500	86	11	92	2.7	4.3	94	1.1
12	58	460	72	10	82	2.2	3.5	80	.76
13	31	280	23	9.7	79	2.1	3.9	88	.93
14	25	230	16	9.2	76	1.9	3.2	74	.64
15	21	200	11	8.7	72	1.7	2.5	64	.43
16	17	170	7.8	9.5	78	2.0	1.6	46	.20
17	14	140	5.3	10	80	2.2	1.4	42	.16
18	12	120	3.9	9.7	79	2.1	1.2	38	.12
19	9.9	105	2.8	9.1	75	1.8	2.1	56	.32
20	12	120	3.9	9.2	80	2.0	3.5	80	.76
21	9.3	100	2.5	8.5	76	1.7	3.3	78	.69
22	6.9	79	1.5	9.3	100	2.5	8.4	150	3.4
23	8.7	95	2.2	7.1	80	1.5	7.4	140	2.8
24	6.9	79	1.5	5.8	68	1.1	4.9	100	1.3
25	13	130	4.6	4.6	56	.70	3.1	74	.62
26	23	200	12	4.6	56	.70	5.9	120	1.9
27	13	110	3.9	5.6	96	1.5	1.3	40	.14
28	12	100	3.2	4.8	86	1.1	1.3	35	.12
29	11	92	2.7	4.0	74	.80	1.3	30	.11
30	9.5	80	2.1	3.6	68	.66	1.4	42	.16
31	---	---	---	4.9	130	1.7	---	---	---
TOTAL	523.2	---	331.9	253.2	---	55.16	114.9	---	31.32
		JULY			AUGUST			SEPTEMBER	
1	1.2	38	.12	8.4	205	4.6	.76	50	.10
2	1.5	44	.18	5.5	160	2.4	.76	50	.10
3	1.3	40	.14	4.1	135	1.5	.76	50	.10
4	1.7	50	.23	3.6	120	1.2	.76	50	.10
5	1.2	38	.12	3.2	110	.95	.76	50	.10
6	.98	32	.08	2.6	100	.70	.80	51	.11
7	.89	30	.07	2.4	94	.61	.76	50	.10
8	.78	28	.06	2.0	86	.46	.67	46	.08
9	.76	27	.06	2.0	86	.46	.64	44	.08
10	.72	26	.05	1.9	84	.43	.64	44	.08
11	.64	24	.04	1.6	78	.34	.64	44	.08
12	.54	21	.03	1.3	67	.24	.64	44	.08
13	.60	23	.04	1.3	67	.24	.64	44	.08
14	2.7	74	.54	1.2	64	.21	.64	44	.08
15	1.9	52	.27	1.1	61	.18	.58	42	.07
16	1.4	42	.16	.97	57	.15	.54	40	.06
17	1.1	35	.10	.84	52	.12	.63	44	.07
18	.94	31	.08	.92	55	.14	.78	50	.11
19	.89	30	.07	.92	55	.14	.95	54	.14
20	.84	29	.07	.89	54	.13	.95	54	.14
21	.76	28	.06	.96	57	.15	.78	50	.11
22	.76	27	.06	1.4	70	.26	.60	43	.07
23	.76	26	.05	1.6	76	.33	.54	40	.06
24	1.0	50	.14	1.4	70	.26	.56	42	.06
25	14	250	9.5	1.4	70	.26	.59	43	.07
26	5.9	170	2.7	1.2	64	.21	.60	44	.07
27	5.1	150	2.1	1.1	60	.18	.68	46	.08
28	6.4	170	2.9	.91	55	.14	.68	46	.08
29	11	240	7.1	.89	54	.13	.63	45	.08
30	7.8	190	4.0	.87	53	.12	.83	52	.12
31	13	280	9.8	.76	50	.10	---	---	---
TOTAL	89.06	---	40.92	59.23	---	17.34	20.79	---	2.66
YEAR	2057.28		994.91						

05570520 ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL

LOCATION.--Lat 40°16'49", long 90°04'53", in NW¼SE¼ sec.11, T.21 N., R.9 E., Mason County, Hydrologic Unit 07130003, at the Illinois Power Company water intake, 1.3 mi (2.1 km) south of Havana, 1.9 mi (3.1 km) downstream from Spoon River, and at mile 118.6 (190.8 km).

DRAINAGE AREA.--18,300 mi^2 (47,400 km^2), approximately.

PERIOD OF RECORD.--Water years 1978 to current year.

REMARKS.--Water-discharge records from Illinois River at Kingston Mines (station 05568500) and Illinois River at Meredosia (station 05585500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
10...	1500	17002	17002	5720	672	8.3	16.0	16.0	--
NOV									
21...	1500	17002	17002	8480	785	8.1	.0	5.5	--
DEC									
21...	1500	17002	17002	10300	1050	8.2	5.0	1.5	--
FEB									
05...	1400	17002	17002	7030	1020	8.1	-17.0	.0	--
MAR									
08...	1200	17002	17002	61800	700	7.6	2.0	.5	10.1
APR									
11...	1100	17002	17002	57800	568	7.9	10.5	8.5	10.2
11...	1200	17002	17002	57800	568	7.9	11.0	8.5	--
MAY									
02...	1200	17002	17002	57700	632	8.0	25.0	14.5	--
23...	1400	17002	17002	28700	685	8.1	25.0	20.5	--
JUN									
14...	1200	17002	17002	17400	795	8.0	32.0	24.5	--
JUL									
26...	1100	17002	17002	12600	528	7.7	29.0	26.5	--
AUG									
21...	1100	17002	17002	27300	620	8.1	26.0	26.0	--
SEP									
25...	1400	17002	17002	6990	735	8.4	29.5	20.5	--

05570520 ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT										
10...	30	--	--	172	13	2.6	.30	1.3	1.6	4.2
NOV										
21...	30	--	65	132	15	2.1	.70	.90	1.6	3.7
DEC										
21...	31	--	108	231	12	3.3	2.1	--	--	--
FEB										
05...	20	--	97	47	2	3.0	2.6	--	--	--
MAR										
08...	29	400	80	415	25	2.2	1.8	--	--	--
APR										
11...	20	--	37	40	5	6.0	.50	--	--	--
11...	18	--	37	38	3	5.9	.50	--	--	--
MAY										
02...	19	--	36	51	3	5.9	.20	--	--	--
23...	21	--	--	72	0	5.1	.10	--	--	--
JUN										
14...	28	--	--	164	14	4.3	.20	--	--	--
JUL										
26...	49	--	--	776	66	2.9	.40	--	--	--
AUG										
21...	30	--	--	33	10	2.3	.10	--	--	--
SEP										
25...	31	--	--	157	22	2.1	.10	--	--	--

DATE	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT									
10...	.46	0	0	10	4400	0	210	.0	10
NOV									
21...	--	--	--	0	910	0	--	.0	--
DEC									
21...	--	--	--	10	4140	0	--	.0	--
FEB									
05...	--	--	--	0	810	0	--	.0	--
MAR									
08...	--	--	--	10	3050	0	--	.0	--
APR									
11...	--	--	--	20	1000	0	--	.0	--
11...	--	--	--	10	1000	0	--	.0	--
MAY									
02...	--	--	--	10	1000	0	--	.0	--
23...	--	--	--	10	1500	0	--	.0	--
JUN									
14...	--	--	--	10	3000	0	--	.0	--
JUL									
26...	--	--	--	30	13000	0	--	--	--
AUG									
21...	--	--	--	10	3300	0	--	.0	--
SEP									
25...	--	--	--	10	2700	0	--	.5	--

05570910 SANGAMON RIVER AT FISHER, IL

LOCATION.--Lat 40°18'44", long 88°19'20", in NE¼NW¼ sec.5, T.21 N., R.8 E., Champaign County, Hydrologic Unit 07130006, on downstream side of bridge on U.S. Highway 136, 1.2 mi (1.9 km) east of Fisher, 8.8 mi (14.2 km) west of Rantoul, and at mile 201.1 (323.6 km).

DRAINAGE AREA.--240 mi^2 (622 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 683.23 ft (208.249 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods and those for periods of no gage-height record, Nov. 19 to Dec.19 and Mar. 3-15, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,380 ft^3/s (237 m^3/s) Mar. 4, 1979, gage height, 18.20 ft (5.547 m), from floodmark; minimum, 2.3 ft^3/s (0.065 m^3/s) Oct. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	unknown	*8380	237	*18.20	5.547	Apr. 12	1645	7800	221	17.85	5.441
Mar. 20	0900	1930	54.7	12.64	3.853	Apr. 26	2115	2470	70.0	13.35	4.069
Mar. 29	0630	2380	67.4	13.24	4.036	July 26	2215	2930	83.0	13.90	4.237

Minimum discharge, 2.3 ft^3/s (0.065 m^3/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.3	7.6	35	5.2	234	1180	606	114	39	857	56
2	6.8	6.8	8.0	60	5.0	400	1020	494	87	29	1400	46
3	6.3	8.6	11	70	4.8	800	1020	812	84	28	1120	41
4	8.6	6.3	16	55	4.8	5400	816	1090	82	446	517	33
5	7.4	5.3	13	40	4.6	2500	780	767	78	417	318	25
6	6.3	4.4	10	25	4.4	2100	651	548	74	190	252	33
7	5.3	12	9.6	15	4.3	2400	483	434	71	136	212	32
8	4.8	10	13	10	4.2	1950	459	359	109	105	174	30
9	5.3	7.4	11	8.5	4.2	1230	489	306	327	94	142	31
10	4.0	6.3	13	8.0	4.1	910	438	282	220	80	123	28
11	3.6	8.0	16	7.5	4.1	680	1080	260	170	68	117	26
12	5.8	6.3	18	7.0	4.0	500	6530	233	132	55	100	24
13	5.8	6.8	20	6.7	4.0	610	4220	209	116	48	84	23
14	4.0	9.3	18	6.3	4.3	720	1620	195	106	421	72	22
15	5.8	14	19	6.3	4.5	520	1090	188	91	926	57	20
16	5.3	12	16	6.7	4.8	425	801	175	83	480	47	19
17	2.9	8.6	14	7.2	5.0	420	606	163	79	236	46	18
18	3.6	8.0	16	7.6	4.8	435	472	157	72	179	63	17
19	4.0	7.5	16	8.0	4.5	952	384	153	89	148	69	17
20	5.8	7.4	17	8.5	4.2	1840	330	145	88	114	46	16
21	6.3	7.0	12	8.3	4.0	1320	292	134	77	96	91	15
22	6.8	6.5	9.3	8.0	4.0	962	268	125	57	82	120	14
23	4.8	6.0	9.8	7.6	4.0	769	249	124	48	71	440	13
24	4.4	5.5	9.7	7.2	4.0	909	470	110	47	72	608	12
25	4.0	5.0	9.2	7.0	13	1030	1210	98	44	615	417	12
26	6.3	5.0	9.9	6.7	110	791	1990	96	44	2710	242	12
27	13	6.5	9.0	6.4	100	623	2000	104	48	2470	168	11
28	6.8	7.0	9.5	6.2	95	1010	1330	92	45	1270	135	11
29	9.3	7.2	9.0	6.0	---	2270	988	83	37	583	110	10
30	8.0	7.2	12	5.8	---	1800	786	88	44	365	89	10
31	5.3	---	20	5.4	---	1450	---	90	---	437	69	---
TOTAL	182.7	224.2	401.6	472.9	423.8	37960	34052	8720	2763	13010	8305	677
MEAN	5.89	7.47	13.0	15.3	15.1	1225	1135	281	92.1	420	268	22.6
MAX	13	14	20	70	110	5400	6530	1090	327	2710	1400	56
MIN	2.9	4.4	7.6	5.4	4.0	234	249	83	37	28	46	10
CFSM	.03	.03	.05	.06	.06	5.10	4.73	1.17	.38	1.75	1.12	.09
IN.	.03	.03	.06	.07	.07	5.88	5.28	1.35	.43	2.02	1.29	.10

WTR YR 1979 TOTAL 107192.2 MEAN 294 MAX 6530 MIN 2.9 CFSM 1.23 IN 16.61

05570910 SANGAMON RIVER AT FISHER, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
06...	0925	80010	--	4.8	--	--	14.0	13.0	--	--	--
13...	1010	80010	--	5.6	--	--	--	13.0	--	--	--
26...	1000	80010	--	5.9	--	--	15.0	11.0	--	--	--
26...	1040	80010	--	4.7	--	--	15.0	11.0	--	--	--
NOV											
14...	1000	80010	--	6.6	--	--	12.0	13.0	--	--	--
17...	0945	80010	--	8.6	--	--	11.0	9.0	--	--	--
DEC											
20...	1340	80010	--	16	--	--	5.0	2.0	--	--	--
JAN											
04...	1015	80010	--	55	--	--	--	.0	--	--	--
17...	1500	80010	17002	7.2	820	8.5	-4.5	1.0	8.0	8	K50
22...	1450	80010	--	8.0	--	--	-2.5	.0	--	--	--
FEB											
07...	1015	80010	--	4.3	--	--	-.5	.0	--	--	--
21...	1000	17002	17002	8.3	830	8.3	2.0	1.0	8.2	9	K10
MAR											
01...	1305	80010	--	233	--	--	2.0	1.0	--	--	--
04...	1315	80010	--	7350	--	--	9.0	1.0	--	--	--
06...	1105	80010	--	2310	--	--	7.0	1.0	--	--	--
08...	1200	80010	--	1890	--	--	6.0	4.0	--	--	--
12...	1150	80010	--	509	--	--	4.0	2.0	--	--	--
16...	1000	17002	17002	450	530	8.0	3.5	3.5	12.8	19	200
19...	1145	80010	--	814	--	--	16.0	7.5	--	--	--
APR											
06...	0700	17002	17002	705	590	8.3	1.0	5.5	11.4	16	390
06...	0800	17002	17002	696	590	8.2	1.0	5.5	11.9	14	240
16...	1030	80010	--	867	--	--	12.0	10.0	--	--	--
MAY											
07...	1300	17002	17002	431	640	8.1	26.5	18.5	--	11	K800
09...	1030	80010	--	320	--	--	21.0	19.0	--	--	--
14...	1445	80010	--	179	--	--	17.0	17.0	--	--	--
17...	0935	80010	--	168	--	--	18.5	17.0	--	--	--
23...	1415	80010	--	121	--	--	20.0	17.0	--	--	--
30...	1000	80010	--	83	--	--	31.0	19.0	--	--	--
JUN											
08...	0900	80010	--	70	--	--	26.0	23.0	--	--	--
12...	1400	17002	17002	129	640	8.2	24.5	20.5	7.3	16	320
JUL											
02...	1400	80010	--	29	--	--	28.5	24.5	--	--	--
20...	1200	17002	17002	113	680	--	31.0	23.5	7.0	12	K700
AUG											
08...	0900	17002	17002	179	660	7.5	31.5	25.5	6.6	10	2100
16...	1030	80010	--	47	--	--	19.0	19.0	--	--	--
SEP											
18...	1400	17002	17002	16	730	8.5	21.0	19.0	9.1	8	K110

K Results based on colony count outside the acceptable range (non-ideal colony count).

05570910 SANGAMON RIVER AT FISHER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
JAN												
17...	41	1	1	7.6	.20	.40	.60	8.2	.12	0	120	--
FEB												
21...	20	3	1	8.1	.70	.40	1.1	9.2	.11	0	270	--
MAR												
16...	11	76	11	2.0	.30	1.1	1.4	3.4	.23	10	160	--
APR												
06...	24	100	14	13	.00	1.2	1.2	14	.16	10	1600	--
06...	24	93	14	13	.00	.70	.70	14	.14	10	1500	--
MAY												
07...	--	69	8	13	.00	.60	.60	14	.10	0	950	--
JUN												
12...	--	103	6	11	.10	1.0	1.1	12	.14	10	1800	--
JUL												
20...	--	93	7	8.9	.00	.80	.80	9.7	.13	0	1600	--
AUG												
08...	--	57	6	8.2	.00	.90	.90	9.1	.09	20	700	100
SEP												
18...	--	14	4	2.2	.00	.50	.50	2.7	.05	0	370	--

05572000 SANGAMON RIVER AT MONTICELLO, IL

LOCATION.--Lat 40°01'51", long 88°35'20", in SW¼ sec.12, T.18 N., R.5 E., Piatt County, Hydrologic Unit 07130006, near center of span on downstream side of highway bridge, 0.5 mi (0.8 km) west of Monticello and at mile 162.2 (261.0 km).

DRAINAGE AREA.--550 mi^2 (1,424 km^2).

PERIOD OF RECORD.--February 1908 to December 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1308. Published as "near Monticello" 1910-12.

REVISED RECORDS.--WSP 525: 1920. WSP 1115: 1946-47. WSP 1208: 1915-16, 1918-20, 1927, 1929, 1939. WSP 1508: 1908(M), 1917, 1928(M).

GAGE.--Water-stage recorder. Datum of gage is 625.89 ft (190.771 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1964, nonrecording gage at site 0.2 mi (0.3 km) downstream at same datum. Oct. 1, 1964, to Oct. 22, 1971, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, Oct. 1-31, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--69 years, 400 ft^3/s (11.33 m^3/s), 9.88 in/yr (251 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft^3/s (538 m^3/s) Oct. 4, 1926, gage height, 18.50 ft (5.639 m), from graph based on gage readings, site then in use; maximum gage height, 18.55 ft (5.654 m) May 16, 1968; minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Oct. 10, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 6	0745	*9770	277	*17.27	5.264	Apr. 28	1000	3010	85.2	13.32	4.060
Mar. 22	1130	2070	58.6	12.60	3.840	July 29	1645	2050	58.1	12.57	3.831
Mar. 31	1015	2620	74.2	13.30	4.054	Aug. 2	0900	2800	79.3	13.50	4.115
Apr. 12	1245	8400	238	16.79	5.118						

Minimum daily discharge, 8.0 ft^3/s (0.23 m^3/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	19	92	29	550	2280	1910	204	90	2020	141
2	11	13	18	130	29	700	2020	1560	232	98	2760	124
3	14	13	25	150	28	1000	1830	1530	215	121	2620	113
4	20	11	35	120	27	5000	1720	1610	195	111	2440	105
5	17	10	30	85	26	7460	1680	1640	188	479	1980	98
6	15	14	25	70	26	9250	1560	1630	180	630	1220	87
7	13	21	20	60	25	7060	1390	1390	176	343	697	84
8	12	17	28	55	25	4020	1190	1070	170	229	504	78
9	12	14	25	50	24	2910	1100	850	244	193	404	70
10	11	13	30	45	24	2190	1090	722	556	169	331	63
11	11	9.5	35	43	23	1980	1970	641	449	144	286	62
12	14	9.3	40	41	23	1790	7130	582	328	124	252	56
13	14	11	45	40	25	1490	7180	532	265	110	220	51
14	12	16	40	38	26	1470	6730	509	230	146	193	47
15	10	14	42	35	29	1490	3890	504	202	605	172	43
16	9.0	14	36	37	30	1500	2340	467	176	847	156	40
17	8.0	25	32	40	28	1320	1840	437	158	705	142	39
18	10	23	36	42	26	1070	1580	412	148	358	133	39
19	11	18	32	45	24	1390	1300	390	140	247	198	41
20	12	17	34	47	23	1750	1040	362	152	192	181	34
21	12	17	31	46	23	1860	856	340	158	156	344	31
22	11	16	29	45	23	2040	742	314	150	129	323	29
23	11	15	24	43	23	1930	672	304	129	114	404	25
24	11	13	25	42	150	1900	1330	290	113	111	772	26
25	13	12	21	40	650	1900	2100	270	106	1070	822	25
26	17	12	27	39	600	1880	2500	249	99	1300	578	24
27	14	17	21	37	550	1730	2690	249	95	1350	361	23
28	14	18	24	36	480	1600	2900	240	93	1610	278	24
29	13	18	23	35	---	1730	2610	230	96	1980	230	25
30	12	18	28	33	---	2100	2160	213	89	1850	194	23
31	11	---	48	31	---	2570	---	207	---	1490	167	---
TOTAL	387.0	451.8	928	1692	3019	76630	69420	21654	5736	17101	21382	1670
MEAN	12.5	15.1	29.9	54.6	108	2472	2314	699	191	552	690	55.7
MAX	20	25	48	150	650	9250	7180	1910	556	1980	2760	141
MIN	8.0	9.3	18	31	23	550	672	207	89	90	133	23
CFSM	.02	.03	.05	.10	.20	4.50	4.21	1.27	.35	1.00	1.26	.10
IN.	.03	.03	.06	.11	.20	5.18	4.70	1.46	.39	1.16	1.45	.11

CAL YR 1978 TOTAL 90753.8 MEAN 249 MAX 1960 MIN 8.0 CFSM .45 IN 6.14
WTR YR 1979 TOTAL 220070.8 MEAN 603 MAX 9250 MIN 8.0 CFSM 1.10 IN 14.88

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL

LOCATION.--Lat 40°00'08", long 88°38'07", in SE¼ sec.21, T.18 N., R.5 E., Piatt County, Hydrologic Unit 07130006, at bridge on county road, 0.1 mi (0.2 km) downstream from Wildcat Creek, 3.4 mi (5.5 km) upstream from Willow Branch, 3.6 mi (5.8 km) southwest of Monticello, and at mile 158.0 (254.2 km).

DRAINAGE AREA.--573 mi^2 (1,484 km^2).

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
19...	1600	17002	17002	9.9	785	8.2	15.5	12.0	--
DEC									
05...	1300	17002	17002	27	775	8.4	6.5	4.0	--
JAN									
03...	1400	17002	17002	135	670	8.3	-10.0	.5	12.0
FEB									
23...	1100	17002	17002	21	640	8.3	4.5	1.0	12.0
MAR									
15...	1500	17002	17002	1340	490	8.4	1.0	3.5	12.2
APR									
05...	1400	17002	17002	1510	550	8.1	15.5	14.0	10.9
05...	1500	17002	17002	1510	550	8.1	15.5	14.0	10.8
MAY									
08...	0900	17002	17002	960	590	8.2	28.0	18.0	--
JUN									
11...	1300	17002	17002	400	450	8.0	26.0	21.0	--
11...	1400	17002	17002	400	450	8.0	26.0	21.0	--
JUL									
10...	1000	17002	17002	150	620	8.3	25.5	22.0	6.9
30...	1100	17002	17002	1660	440	7.0	28.5	24.5	5.6
SEP									
19...	1000	17002	17002	37	720	8.2	17.0	18.0	7.4

05572125 SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT									
19...	15	--	--	38	8	.80	.20	.50	.70
DEC									
05...	11	K32	56	9	2	.80	.30	.20	.50
JAN									
03...	30	900	49	77	9	5.2	.20	1.2	1.4
FEB									
23...	20	600	61	17	5	2.8	1.0	1.1	2.1
MAR									
15...	14	K50	18	48	7	9.0	.10	1.0	1.1
APR									
05...	13	K40	23	48	6	11	.00	.90	.90
05...	12	--	23	41	6	11	.00	.60	.60
MAY									
08...	14	500	--	155	9	12	.00	.90	.90
JUN									
11...	38	--	--	286	26	8.0	.10	2.0	2.1
11...	40	--	--	284	40	8.0	.10	2.2	2.3
JUL									
10...	17	K600	--	125	16	8.5	.00	1.1	1.1
30...	14	3100	--	19	3	6.0	.00	.90	.90
SEP									
19...	15	K70	--	29	5	2.0	.10	.40	.50

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
OCT									
19...	1.5	.40	10	0	0	0	1360	0	.0
DEC									
05...	1.3	.31	6	0	0	0	--	0	.0
JAN									
03...	6.6	.29	2	0	0	20	1650	0	.0
FEB									
23...	4.9	.38	3	0	0	0	470	0	.0
MAR									
15...	10	.16	0	0	0	0	1100	0	.0
APR									
05...	12	.11	1	0	10	10	1100	100	.0
05...	12	.12	1	0	10	10	890	0	.0
MAY									
08...	13	.17	2	0	0	10	1600	0	.0
JUN									
11...	10	.39	0	0	0	10	5800	0	.0
11...	10	.40	0	0	0	10	5900	0	.0
JUL									
10...	9.6	.22	--	--	--	--	--	--	.0
30...	6.9	.16	1	0	0	0	560	0	.0
SEP									
19...	2.5	.22	4	0	0	0	800	0	.0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05572450 FRIENDS CREEK AT ARGENTA, IL

LOCATION.--Lat 39°59'21", long 88°48'18", in SE¼NE¼ sec.25, T.18 N., R.3 E., Macon County, Hydrologic Unit 07130006, on right bank at upstream side of bridge on State Highways 47 and 48, 70 ft (21 m) downstream from Illinois Central Gulf Railroad bridge, 1 mi (2 km) northeast of Argenta, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--111 mi^2 (287 km^2).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 629.26 ft (191.798 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--13 years, 102 ft^3/s (2.889 m^3/s), 12.48 in/yr (317 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft^3/s (160 m^3/s) May 16, 1968, gage height, 15.63 ft (4.764 m), from rating curve extended above 2,200 ft^3/s (62.3 m^3/s); maximum gage height, 15.71 ft (4.778 m) Apr. 12, 1979; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0730	4230	120	15.65	4.770	Mar. 30	0115	617	17.5	7.47	2.277
Mar. 14	0800	651	18.4	7.60	2.316	Apr. 12	0345	*4270	121	15.71	4.788
Mar. 20	0400	1060	30.0	8.99	2.740	Apr. 26	1845	928	26.3	8.57	2.612
Mar. 24	1000	788	22.3	8.10	2.469	Aug. 2	1330	643	18.2	7.57	2.307

Minimum discharge, 0.13 ft^3/s (0.004 m^3/s) July 23, 24, Sept. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.8	4.5	62	5.0	241	382	262	37	13	257	2.0
2	1.2	1.8	4.0	59	5.0	412	348	232	34	12	604	1.6
3	2.2	1.8	5.0	40	5.0	1070	298	266	34	11	451	1.3
4	2.0	1.8	6.0	29	5.5	3530	280	260	37	11	259	1.3
5	1.4	2.0	5.0	22	5.5	1760	262	222	34	11	158	1.0
6	1.2	2.7	4.5	17	5.5	1270	215	198	33	8.9	110	.78
7	1.2	3.3	10	13	5.0	1460	191	174	30	7.6	77	.75
8	1.2	3.3	25	11	5.0	1130	188	160	30	7.3	48	.70
9	1.0	2.7	20	10	5.0	909	173	146	29	7.3	33	.65
10	.81	2.0	18	9.0	5.0	732	150	135	33	8.2	25	.60
11	1.2	1.8	17	8.5	5.0	552	1580	125	29	7.6	22	.55
12	1.4	1.5	16	8.0	5.0	434	3230	116	26	6.4	16	.50
13	1.4	1.4	15	8.0	5.5	465	1640	112	26	5.9	12	.45
14	1.4	3.3	14	7.5	5.5	625	1120	107	25	5.9	10	.43
15	1.4	2.7	13	7.5	6.0	458	808	102	24	7.0	9.2	.41
16	1.4	2.5	12	8.0	6.0	358	638	97	22	5.9	8.5	.39
17	1.4	5.2	11	8.0	5.5	319	499	92	24	4.0	7.3	.38
18	1.2	5.6	11	8.5	5.5	321	416	86	22	2.8	7.0	.37
19	1.2	3.3	11	9.0	5.0	800	324	82	21	2.1	18	.36
20	1.2	2.7	12	9.5	5.0	965	273	76	20	1.6	8.6	.35
21	1.2	2.2	13	9.5	10	661	234	62	20	1.1	7.0	.34
22	1.2	2.0	11	9.0	20	485	207	56	20	.51	5.9	.34
23	1.2	3.0	10	8.5	180	485	181	55	18	.25	5.4	.33
24	1.4	6.5	9.6	8.0	350	757	334	52	16	1.0	5.1	.32
25	3.0	5.5	9.2	7.5	300	664	617	49	13	24	4.4	.31
26	5.6	4.0	8.8	7.0	232	488	832	48	12	87	3.8	.25
27	2.7	5.0	8.0	7.0	157	423	715	52	13	49	3.2	.13
28	2.2	8.0	8.0	6.5	158	427	499	45	13	25	2.8	.13
29	2.0	6.5	10	6.0	---	584	384	40	13	15	2.5	.31
30	1.8	5.0	21	5.5	---	586	315	41	13	15	2.1	.31
31	1.8	---	40	5.5	---	467	---	39	---	96	2.0	---
TOTAL	50.91	100.9	382.6	434.5	1512.5	23838	17333	3589	721	460.36	2184.8	17.64
MEAN	1.64	3.36	12.3	14.0	54.0	769	578	116	24.0	14.9	70.5	.59
MAX	5.6	8.0	40	62	350	3530	3230	266	37	96	604	2.0
MIN	.81	1.4	4.0	5.5	5.0	241	150	39	12	.25	2.0	.13
CFSM	.02	.03	.11	.13	.49	6.93	5.21	1.05	.22	.13	.64	.005
IN.	.02	.03	.13	.15	.51	7.99	5.81	1.20	.24	.15	.73	.01

CAL YR 1978 TOTAL 24017.96 MEAN 65.8 MAX 894 MIN .12 CFSM .59 IN 8.05
WTR YR 1979 TOTAL 50625.21 MEAN 139 MAX 3530 MIN .13 CFSM 1.25 IN 16.97

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL

LOCATION.--Lat 39°49'52", long 88°58'35", in NE¼NE¼ sec.21, T.16 N., R.2 E., Macon County, Hydrologic Unit 07130006, at south edge of Decatur, 1.2 mi (1.9 km) downstream from dam and gage 05573505, 2.5 mi (4.0 km) upstream from Stevens Creek, and at mile 129.0 (207.6 km).

DRAINAGE AREA.--938 mi^2 (2,429 km^2).

PERIOD OF RECORD.--October 1978 to September 1979. Additional chemical data for water years 1965-66, 1968-69, 1971-77 are published in Water-Resources Investigations 78-23 and 79-24 as site E 09.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
03...	1100	17002	17002	4.1	690	7.4	20.0	16.5	2.5
24...	1200	80010	--	3.0	--	--	14.0	12.0	--
NOV									
21...	1300	17002	17002	2.8	695	7.8	1.0	6.0	4.7
DEC									
06...	1440	80010	--	2.8	--	--	-2.0	4.5	--
26...	1500	17002	17002	6.6	580	8.2	-4.5	1.5	13.2
JAN									
31...	1400	17002	17002	6.2	740	8.6	-13.5	1.0	13.6
FEB									
27...	1200	17002	17002	2000	670	8.3	4.5	2.0	11.4
MAR									
02...	1130	80010	--	--	--	--	3.5	1.0	--
07...	1640	80010	--	10500	--	--	1.0	--	--
14...	1300	17002	17002	3500	380	8.1	4.5	1.0	14.2
APR									
05...	1100	17002	17002	3400	470	8.3	16.5	7.0	12.4
05...	1300	17002	17002	3400	470	8.3	16.5	7.0	12.4
MAY									
03...	1300	17002	17002	2800	435	--	12.0	13.0	12.0
JUN									
12...	1100	17002	17002	450	580	8.2	25.5	21.0	8.1
15...	1055	80010	--	277	--	--	27.5	24.0	--
26...	1200	17002	17002	720	590	8.4	27.0	24.5	8.7
AUG									
15...	1200	17002	17002	155	--	--	--	21.0	7.9
30...	1300	17002	17002	44	540	8.2	26.5	26.5	7.4
SEP									
18...	1330	80010	--	--	--	--	23.0	24.5	--

05573540 SANGAMON RIVER AT ROUTE 48 AT DECATUR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT									
03...	24	K31300	--	--	21	5	.50	1.0	.90
NOV									
21...	16	--	83	40	25	4	.30	.80	.60
DEC									
26...	16	--	--	29	15	3	.30	.30	.90
JAN									
31...	13	--	69	43	8	2	1.1	.60	--
FEB									
27...	14	710	57	37	16	2	3.7	.40	--
MAR									
14...	17	K1100	33	14	36	5	6.4	.20	--
APR									
05...	13	K60	41	20	31	3	9.8	.10	--
05...	13	--	41	20	20	10	9.5	.10	--
MAY									
03...	18	4200	37	17	57	6	8.4	.00	--
JUN									
12...	10	K1200	53	25	5	4	7.4	.10	--
26...	16	370	53	26	39	6	5.9	.00	--
AUG									
15...	15	580	32	13	54	7	4.3	.20	--
30...	15	9700	46	22	28	7	3.0	.10	--

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT								
03...	1.9	2.4	.28	0	620	10	.0	--
NOV								
21...	1.4	1.7	--	0	1300	0	--	0
DEC								
26...	1.2	1.5	.13	0	370	0	.0	--
JAN								
31...	--	--	--	0	200	0	--	0
FEB								
27...	--	--	--	0	270	0	--	0
MAR								
14...	--	--	--	10	1100	0	--	0
APR								
05...	--	--	--	10	870	0	--	0
05...	--	--	--	20	890	0	--	0
MAY								
03...	--	--	--	20	1200	0	--	0
JUN								
12...	--	--	--	10	600	0	--	0
26...	--	--	--	0	580	0	--	0
AUG								
15...	--	--	--	10	1100	0	--	0
30...	--	--	--	0	630	0	--	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05573650 SANGAMON RIVER NEAR NIANTIC, IL

LOCATION.--Lat 39°47'48", long 89°06'15", in NE¼ sec.32, T.16 N., R.1 E., Macon County, Hydrologic Unit 07130006, at Lincoln Trail Bridge in Lincoln Homestead Memorial Park, 5.0 mi (8.0 km) southeast of Niantic, 7.3 mi (11.7 km) upstream from Old River, 9.2 mi (14.8 km) downstream from Stevens Creek, and at mile 116.9 (188.1 km).

DRAINAGE AREA.--1,054 mi^2 (2,730 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site E 05.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
23...	1400	17002	17002	34	2000	7.7	12.0	15.5	--	37
24...	1415	80010	--	37	--	--	13.0	14.5	--	--
NOV										
09...	1300	17002	17002	40	1800	7.7	20.0	13.5	4.0	40
21...	1400	80010	--	45	--	--	3.0	9.0	--	--
DEC										
13...	1300	17002	17002	118	1510	7.9	-1.5	2.0	12.8	33
JAN										
23...	1300	17002	17002	150	1200	8.5	.5	3.0	11.6	30
FEB										
13...	1600	17002	17002	93	1420	8.4	-2.0	3.5	10.8	29
22...	1230	80010	--	200	--	--	3.5	5.0	--	--
MAR										
12...	1400	17002	17002	4890	320	7.7	4.5	2.0	12.0	19
APR										
09...	1000	17002	17002	2800	570	8.5	3.5	7.0	11.2	12
09...	1200	17002	17002	2800	555	8.5	3.5	7.0	11.2	13
MAY										
09...	1200	17002	17002	2100	570	7.9	23.5	24.0	7.1	16
JUN										
06...	1200	17002	17002	334	790	8.0	30.0	25.5	4.1	18
15...	0900	80010	--	546	--	--	25.5	23.0	--	--
27...	1200	17002	17002	176	740	8.2	28.0	24.0	6.5	20
JUL										
16...	1200	17002	17002	570	710	8.1	22.0	24.0	--	31
SEP										
05...	1200	17002	17002	70	930	7.8	27.0	27.0	5.1	25
18...	1430	80010	--	--	--	--	26.5	23.0	--	--

05573650 SANGAMON RIVER NEAR NIANTIC, IL--Continued

WATER QUALITY OATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

OATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ACIOITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)	SULFATE OIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIOE, OIS-SOLVED (MG/L AS CL) (00940)	SOLIOS, RESIOUE AT 105 DEG. C, SUS-PENOEO (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDEO (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
23...	--	.0	258	255	295	8	1	.60	7.9	2.0
NOV										
09...	234	.0	250	204	245	9	4	.30	8.3	--
OEC										
13...	74	.0	286	157	220	12	4	1.8	6.3	1.4
JAN										
23...	K30	.0	268	105	165	9	4	1.1	3.5	--
FEB										
13...	--	.0	264	129	188	8	3	1.2	4.6	--
MAR										
12...	--	.0	87	32	14	65	8	5.3	.20	--
APR										
09...	--	.0	159	49	28	47	7	9.9	.20	--
09...	--	.0	158	50	28	47	3	9.6	.20	--
MAY										
09...	K60000	.0	164	51	24	68	11	9.1	.20	--
JUN										
06...	2100	.0	219	70	56	48	8	7.9	1.3	--
27...	1700	.0	212	65	57	28	6	5.4	.70	--
JUL										
16...	--	.0	180	69	62	46	12	2.1	1.2	--
SEP										
05...	820	.0	216	99	10	37	8	2.2	2.0	--

OATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAO, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT										
23...	9.9	10	--	0	330	0	520	.0	40	0
NOV										
09...	--	--	--	0	410	20	420	.0	20	0
OEC										
13...	7.7	9.5	--	10	270	0	140	.0	--	2
JAN										
23...	--	--	--	20	300	0	170	.0	30	0
FEB										
13...	--	--	--	0	300	40	230	.0	0	0
MAR										
12...	--	--	.26	10	540	0	70	.0	10	0
APR										
09...	--	--	--	20	740	0	70	.0	10	0
09...	--	--	--	20	710	0	60	.0	10	0
MAY										
09...	--	--	--	0	840	0	90	.0	30	0
JUN										
06...	--	--	--	20	600	0	120	.1	40	0
27...	--	--	--	10	730	0	210	.1	10	0
JUL										
16...	--	--	--	0	480	0	160	.0	20	0
SEP										
05...	--	--	--	10	700	0	130	.0	0	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05573800 SANGAMON RIVER AT ROBY, IL

LOCATION.--Lat 39°44'32", long 89°23'57", in SW¼ sec.18, T.15 N., R.3 W., Sangamon County, Hydrologic Unit 07130006, at bridge on county road, 0.1 mi (0.2 km) north of Roby, 7.2 mi (11.6 km) upstream from Buckhart Creek, 8.1 mi (13.0 km) downstream from Mosquito Creek, and at mile 98.5 (158.5 km).

DRAINAGE AREA.--1,264 mi² (3,274 km²).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1965-66, 1968-69, 1971-72 are published in Water-Resources Investigations 78-23 as site E 16.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
23...	1600	17002	17002	57	1017	8.0	12.0	14.5	--	30
24...	1600	80010	--	53	--	--	9.5	11.5	--	--
NOV										
09...	1200	17002	17002	66	1900	7.9	18.0	10.5	5.5	35
DEC										
06...	1310	80010	--	71	--	--	-2.5	3.0	--	--
13...	1200	17002	17002	78	790	8.2	2.0	2.0	14.2	17
JAN										
23...	1200	17002	17002	355	1460	8.5	1.0	4.0	12.0	22
FEB										
13...	1300	17002	17002	140	1390	8.2	-2.0	1.0	6.2	26
22...	1545	80010	--	240	--	--	4.5	.5	--	--
MAR										
12...	1600	17002	17002	7100	330	7.7	4.5	2.0	13.3	21
APR										
09...	1300	17002	17002	2980	565	8.5	3.5	7.0	10.9	12
09...	1400	17002	17002	2980	560	8.5	4.0	--	10.9	17
18...	1415	80010	--	7440	--	--	21.5	14.5	--	--
MAY										
02...	0945	80010	--	--	--	--	13.5	12.5	--	--
09...	1000	17002	17002	2770	575	8.0	23.5	23.0	6.6	15
JUN										
06...	1100	17002	17002	678	830	7.9	25.5	25.5	4.0	29
14...	1015	80010	--	713	--	--	26.0	22.5	--	--
27...	1000	17002	17002	479	1160	8.1	25.0	23.0	6.2	38
JUL										
17...	1000	17002	17002	220	650	8.0	21.0	23.0	4.9	19
SEP										
05...	1100	17002	17002	170	810	8.2	24.5	24.5	8.9	29
18...	1530	80010	--	--	--	--	26.0	22.0	--	--
27...	0900	17002	17002	57	1055	8.0	22.0	19.0	6.5	39
27...	1000	17002	17002	57	1055	8.1	26.5	20.0	7.2	40

05573800 SANGAMON RIVER AT ROBY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
23...	--	.0	250	212	230	8	3	2.6	2.7	1.6
NOV										
09...	128	.0	276	230	235	6	2	1.2	5.0	--
DEC										
13...	96	.0	214	75	70	7	0	1.0	1.1	.40
JAN										
23...	K100	.0	250	93	180	4	0	1.3	3.0	--
FEB										
13...	--	.0	258	129	190	8	1	1.3	4.1	--
MAR										
12...	--	.0	88	31	15	80	11	6.3	.20	--
APR										
09...	--	.0	163	50	29	103	15	9.6	.20	--
09...	--	.0	160	50	29	50	9	9.4	.20	--
MAY										
09...	K60000	.0	163	51	26	79	7	9.1	.10	--
JUN										
06...	2100	.0	224	74	68	157	18	7.6	1.5	--
27...	K400	.0	254	118	137	79	14	4.1	3.0	--
JUL										
17...	380	.0	194	63	51	31	8	2.4	.20	--
SEP										
05...	K120	.0	221	81	76	34	9	2.4	.00	--
27...	K1500	.0	280	196	228	34	11	2.6	2.1	--
27...	100	.0	285	198	228	31	11	2.7	2.1	--

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT									
23...	4.3	6.9	0	200	0	710	.0	30	0
NOV									
09...	--	--	0	400	20	1200	.0	20	0
DEC									
13...	1.5	2.5	10	130	0	130	.0	10	--
JAN									
23...	--	--	10	260	0	200	.0	30	0
FEB									
13...	--	--	0	400	0	330	.2	0	--
MAR									
12...	--	--	10	2100	0	100	.0	20	0
APR									
09...	--	--	20	750	0	60	.0	10	0
09...	--	--	10	710	0	60	.0	10	0
MAY									
09...	--	--	10	700	0	90	.1	20	0
JUN									
06...	--	--	20	1400	0	290	.1	40	0
27...	--	--	10	1200	0	250	.1	20	0
JUL									
17...	--	--	0	360	0	250	.0	0	0
SEP									
05...	--	--	10	500	0	180	.0	20	0
27...	--	--	0	700	0	920	.0	0	0
27...	--	--	10	600	0	920	.0	0	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05574500 FLAT BRANCH NEAR TAYLORVILLE, IL

LOCATION.--Lat 39°33'14", long 89°15'12", in SE¼SE¼ sec.24, T.13 N., R.2 W., Christian County, Hydrologic Unit 07130007, on right bank at downstream side of bridge on old State Highway 29, 1.4 mi (2.3 km) east of Taylorville and at mile 1.6 (2.6 km).

DRAINAGE AREA.--276 mi^2 (715 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 562.44 ft (171.431 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--30 years, 203 ft^3/s (5.749 m^3/s), 9.99 in/yr (254 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) June 29, 1957, gage height, 19.55 ft (5.959 m); no flow at times in 1953-56, 1960, 1964, 1966, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (40 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 24	0930	1970	55.8	[a]12.22	3.725	Apr. 12	1515	*11300	320	*18.79	5.727
Mar. 4	2330	9180	260	17.74	5.407	Apr. 27	1330	1760	49.8	11.27	3.435
Mar. 25	1330	3270	92.6	13.35	4.069						

a Ice jam.

Minimum daily discharge, 1.2 ft^3/s (0.034 m^3/s) Oct. 9, Nov. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	35	110	10	1400	851	547	45	20	735	10
2	1.4	1.2	31	100	10	1570	814	427	44	18	1200	9.6
3	1.6	1.2	28	80	10	1960	721	434	51	17	1080	9.1
4	1.5	1.3	26	60	11	6360	631	519	69	16	971	9.0
5	1.4	1.4	26	48	12	7010	589	531	45	17	718	9.7
6	1.5	1.6	24	40	12	4470	560	521	42	17	316	11
7	1.6	1.7	25	34	11	2420	534	418	40	14	108	9.6
8	1.4	1.7	27	30	12	1640	461	300	40	13	58	8.4
9	1.2	2.0	29	25	12	1280	393	244	80	12	35	7.5
10	1.3	2.2	34	21	12	1180	342	208	72	12	26	7.0
11	1.4	2.2	33	19	12	1060	1470	186	69	12	21	6.7
12	1.4	2.2	30	17	13	877	9480	170	56	11	18	6.3
13	1.6	2.3	28	17	13	732	7310	160	45	10	17	6.2
14	1.8	5.2	26	18	13	648	3610	149	42	11	14	5.8
15	2.5	15	24	19	13	631	1860	142	38	12	12	5.5
16	2.4	28	27	20	13	581	1090	134	33	12	12	5.4
17	2.1	32	25	20	13	496	702	115	30	12	11	5.2
18	1.8	26	23	21	14	429	542	102	28	8.0	9.7	5.1
19	1.6	23	22	21	20	470	434	97	85	6.9	9.0	4.9
20	1.6	21	21	20	100	597	345	93	244	6.1	10	4.8
21	1.9	20	26	20	500	708	290	84	87	5.6	87	4.8
22	2.1	16	27	19	1300	708	251	74	50	5.2	196	4.7
23	2.0	14	24	17	1500	702	221	68	38	5.5	152	4.6
24	1.9	12	20	16	1900	1800	379	64	32	10	50	4.4
25	1.9	12	23	15	1800	3070	549	60	30	13	24	4.4
26	1.9	12	20	14	1650	2480	984	58	28	18	17	4.6
27	1.9	13	20	13	1570	1600	1680	61	23	40	14	4.7
28	2.1	20	17	12	1450	1060	1520	65	22	98	13	4.7
29	1.9	31	17	12	---	810	1180	58	21	123	12	4.7
30	1.6	38	21	11	---	751	728	51	21	89	11	4.8
31	1.5	---	35	10	---	792	---	48	---	347	11	---
TOTAL	53.2	360.6	794	899	12006	50282	40521	6188	1550	1011.3	5967.7	193.2
MEAN	1.72	12.0	25.6	29.0	429	1622	1351	200	51.7	32.6	193	6.44
MAX	2.5	38	35	110	1900	7010	9480	547	244	347	1200	11
MIN	1.2	1.2	17	10	10	429	221	48	21	5.2	9.0	4.4
CFSM	.006	.04	.09	.11	1.55	5.88	4.90	.73	.19	.12	.70	.02
IN.	.01	.05	.11	.12	1.62	6.78	5.46	.83	.21	.14	.80	.03

CAL YR 1978 TOTAL 82438.8 MEAN 226 MAX 4120 MIN 1.2 CFSM .82 IN 11.11
WTR YR 1979 TOTAL 119826.0 MEAN 328 MAX 9480 MIN 1.2 CFSM 1.19 IN 16.15

05574500 FLAT BRANCH NEAR TAYLORVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EOH 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
16...	1430	80010	--	2.5	--	--	13.0	10.5	--
NOV									
30...	1300	80010	--	38	--	--	1.5	3.5	--
JAN									
08...	1300	80010	--	30	--	--	-11.0	5.0	--
MAR									
02...	1100	80010	--	1570	--	--	3.0	1.0	--
APR									
12...	1300	17002	17002	7130	50	7.9	22.0	9.0	11.3
17...	1530	80010	--	688	--	--	19.5	17.0	--
MAY									
01...	1000	17002	17002	557	520	7.9	11.0	10.5	9.2
01...	1100	17002	17002	552	520	7.9	11.0	10.5	9.2
31...	1000	17002	17002	48	585	7.9	25.5	21.0	6.1
JUN									
14...	1715	80010	--	43	--	--	30.0	25.5	--
JUL									
17...	1400	80010	--	9.6	--	--	25.5	27.0	--
19...	1000	17002	17002	7.0	610	8.1	25.0	--	6.8
AUG									
23...	1300	17002	17002	146	220	7.5	26.5	23.5	5.2
SEP									
13...	1000	17002	17002	6.3	600	8.1	24.0	23.0	6.1

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
APR									
12...	235	3400	--	--	49	16	1950	230	1.9
MAY									
01...	11	600	--	--	51	28	56	11	8.6
01...	13	K1000	--	--	51	28	64	12	8.7
31...	18	170	--	--	52	31	125	12	7.2
JUL									
19...	25	200	.0	220	47	--	185	23	1.2
AUG									
23...	30	K800	.0	51	24	--	268	26	1.5
SEP									
13...	33	200	.0	232	41	--	252	22	.10

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR									
12...	.10	2.5	--	--	0	--	--	--	0
MAY									
01...	.00	.14	--	--	0	--	--	--	--
01...	.00	.15	--	--	0	--	--	--	--
31...	.00	.21	--	--	0	--	--	--	--
JUL									
19...	.00	--	10	2800	0	400	.0	0	--
AUG									
23...	.10	--	0	3300	0	250	.0	30	--
SEP									
13...	.00	--	10	4300	100	560	.1	30	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05575500 SOUTH FORK SANGAMON RIVER AT KINCAID, IL

LOCATION.--Lat 39°34'44", long 89°23'31", in NE¼ sec.14, T.13 N., R.3 W., Christian County, Hydrologic Unit 07130007, at bridge on State Highway 104, 1.0 mi (1.6 km) southeast of Kincaid, 5.0 mi (8.0 km) upstream from Panther Creek, 5.6 mi (9.0 km) upstream from Bear Creek, and at mile 37.8 (60.8 km).

DRAINAGE AREA.--562 mi^2 (1,456 km^2).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EO 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
16...	1645	80010	--	6.4	--	--	13.0	11.0	--	--	--
23...	1100	17002	17002	7.0	1100	7.1	11.5	13.5	--	43	--
NOV											
09...	1000	17002	17002	17	1020	7.2	13.5	10.0	1.6	37	K80
DEC											
06...	1130	80010	--	34	--	--	-1.0	2.5	--	--	--
13...	1000	17002	17002	47	715	7.7	.0	1.0	14.6	14	K34
JAN											
25...	1100	80010	--	52	--	--	17.0	.5	--	--	--
FEB											
06...	1100	17002	17002	57	720	8.0	-5.5	2.0	3.6	13	K20
MAR											
12...	1100	17002	17002	1850	410	7.9	3.5	1.0	12.0	23	--
29...	1000	17002	17002	1930	375	8.1	17.0	10.0	8.6	29	K190
APR											
12...	1000	17002	17002	9640	110	7.8	20.0	9.0	10.0	227	4100
12...	1200	17002	17002	10200	90	7.7	21.5	9.0	10.0	243	3900
MAY											
10...	1100	17002	17002	493	515	7.7	24.5	23.0	6.3	27	30
JUN											
07...	1100	17002	17002	73	560	7.5	25.0	23.0	3.7	16	K30
14...	1600	80010	--	81	--	--	30.0	25.0	--	--	--
28...	1100	17002	17002	43	645	7.6	28.0	23.5	4.9	15	K110
JUL											
24...	1100	17002	17002	450	140	7.4	25.5	19.5	4.8	126	43000
SEP											
06...	1000	17002	17002	15	655	7.4	23.5	22.0	--	21	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05575500 SOUTH FORK SANGAMON RIVER AT KINCAID, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	*SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, ND2+ND3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT											
23...	.0	154	270	--	92	16	1.0	.20	2.1	2.3	3.3
NOV											
09...	.0	160	255	78	74	12	.50	.60	1.8	2.4	2.9
DEC											
13...	.0	190	104	41	13	1	2.9	.40	.30	.70	3.6
FEB											
06...	.0	285	107	37	11	1	2.3	1.0	.60	1.6	3.9
MAR											
12...	.0	74	--	22	72	12	6.8	.20	1.5	1.7	8.5
29...	.0	43	46	22	191	14	7.0	.10	1.3	1.4	8.4
APR											
12...	.0	9	44	15	910	--	1.9	.20	7.2	7.4	9.3
12...	.0	19	45	15	1220	150	1.8	.20	8.4	8.6	10
MAY											
10...	.0	126	58	28	222	25	6.7	.20	1.3	1.5	8.2
JUN											
07...	.0	158	68	30	71	12	4.1	.30	.80	1.1	5.2
28...	.0	187	75	35	63	11	4.6	.20	.70	.90	5.5
JUL											
24...	.0	41	30	13	1560	60	1.3	.30	5.3	5.6	6.9
SEP											
06...	.0	145	134	38	60	10	1.9	.40	1.0	1.4	3.3

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
OCT											
23...	--	2	0	0	0	1910	0	1220	.0	0	--
NOV											
09...	1.4	--	--	--	10	1860	0	1740	.0	20	0
DEC											
13...	.37	--	--	--	0	3260	0	170	.0	10	--
FEB											
06...	.24	--	--	--	0	4120	100	340	.0	10	0
MAR											
12...	.26	1	0	0	10	720	0	--	.0	10	--
29...	.31	--	--	--	10	2600	0	110	.0	20	0
APR											
12...	2.2	--	--	--	50	21000	0	1300	.0	130	0
12...	2.4	--	--	--	60	23000	0	1300	.0	160	0
MAY											
10...	.38	--	--	--	10	4500	0	320	.0	20	0
JUN											
07...	.31	--	--	--	0	4200	0	440	.0	20	1
28...	.24	--	--	--	0	5100	0	470	--	10	0
JUL											
24...	1.2	--	--	--	30	15000	0	1300	.0	100	0
SEP											
06...	.33	--	--	--	10	11000	0	980	.3	40	0

05575800 HORSE CREEK AT PAWNEE, IL

LOCATION.--Lat 39°34'56", long 89°34'20", in NE¼NE¼ sec.18, T.13 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, on left bank at upstream side of bridge on County Highway 28, 0.3 mi (0.5 km) south of Pawnee, 0.7 mi (1.1 km) upstream from Henkle Branch, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--52.2 mi^2 (135.2 km^2).

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 564.81 ft (172.154 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record, Dec. 25 to Mar. 1, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--12 years, 43.1 ft^3/s (1.221 m^3/s), 11.21 in/yr (285 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,290 ft^3/s (235 m^3/s) Apr. 12, 1979, gage height, 19.27 ft (5.873 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	0530	2420	68.5	15.59	4.752	Apr. 12	0230	*8290	235	*19.27	5.873

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.06	15	.20	140	40	47	5.9	1.5	250	.50
2	.00	.00	.06	5.0	.20	240	43	45	4.9	1.2	227	.30
3	.00	.00	.08	1.0	.20	676	34	62	5.1	.98	64	.15
4	.00	.00	.08	1.5	.15	1620	35	44	5.1	2.2	31	.10
5	.00	.00	.08	2.0	.15	305	35	38	4.8	1.8	18	.10
6	.00	.00	.08	1.0	.15	156	28	36	4.3	1.2	12	.08
7	.00	.00	.13	.70	.15	202	26	31	4.1	.89	8.1	.05
8	.00	.00	.15	.40	.15	121	29	27	24	.67	5.2	.05
9	.00	.00	.07	.25	.10	106	26	23	8.8	.67	3.5	.05
10	.00	.00	.07	.25	.10	106	22	21	6.2	.65	2.5	.05
11	.00	.00	.06	.20	.10	85	622	20	5.0	.61	1.9	.01
12	.00	.00	.06	.20	.10	69	2240	18	4.1	.47	1.3	.01
13	.00	.00	.05	.15	.10	124	337	17	4.0	.38	1.3	.00
14	.00	.00	.05	.15	.10	127	187	17	4.0	1.3	.70	.00
15	.00	.00	.05	.15	.10	76	134	15	3.3	.54	.58	.00
16	.00	.00	.06	.15	.20	56	103	13	2.9	.29	.46	.00
17	.00	.00	.06	.20	.30	53	82	13	2.8	.14	.34	.00
18	.00	.00	.06	.30	.50	57	68	13	2.8	.08	.24	.00
19	.00	.00	.05	.50	1.0	461	58	13	2.7	.06	.22	.00
20	.00	.00	.05	1.0	4.0	203	52	12	2.7	.05	14	.00
21	.00	.00	.04	2.0	20	115	48	11	2.8	.04	8.2	.00
22	.00	.00	.03	1.5	160	87	42	9.6	2.6	.02	1.0	.00
23	.00	.00	.01	1.5	600	132	40	9.6	2.4	.01	.54	.00
24	.00	.00	.01	1.0	500	109	203	9.0	2.4	.84	.34	.00
25	.00	.00	.00	.80	300	77	158	8.3	2.1	3.1	.24	.00
26	.00	.03	.00	.60	200	64	517	8.5	1.8	14	.17	.00
27	.00	.11	.00	.50	130	59	188	10	1.5	10	.15	.00
28	.00	.19	.10	.40	85	54	105	8.9	1.6	8.5	.50	.00
29	.00	.15	1.0	.30	---	50	78	7.3	1.9	1.9	5.0	.00
30	.00	.07	5.0	.30	---	46	59	6.6	1.9	8.4	2.0	.00
31	.00	---	20	.20	---	44	---	6.4	---	152	1.0	---
TOTAL	.00	.55	27.60	39.20	2003.05	5820	5639	620.2	128.5	214.49	661.48	1.45
MEAN	.000	.018	.89	1.26	71.5	188	188	20.0	4.28	6.92	21.3	.048
MAX	.00	.19	20	15	600	1620	2240	62	24	152	250	.50
MIN	.00	.00	.00	.15	.10	44	22	6.4	1.5	.01	.15	.00
CFSM	.000	.000	.02	.02	1.37	3.60	3.60	.38	.08	.13	.41	.001
IN.	.00	.00	.02	.03	1.43	4.15	4.02	.44	.09	.15	.47	.00

CAL YR 1978 TOTAL 19308.78 MEAN 52.9 MAX 1730 MIN .00 CFSM 1.01 IN 13.76
WTR YR 1979 TOTAL 15155.52 MEAN 41.5 MAX 2240 MIN .00 CFSM .80 IN 10.80

05575830 BRUSH CREEK NEAR DIVERNON, IL

LOCATION.--Lat 39°35'50", long 89°37'48", in SE¼SE¼ sec.3, T.13 N., R.5 W., Sangamon County, Hydrologic Unit 07130007, on left bank at downstream side of bridge on county road, 0.5 mi (0.8 km) north of State Highway 104, 2.7 mi (4.3 km) northeast of Divernon, and at mile 9.1 (14.6 km).

DRAINAGE AREA.--32.4 mi^2 (83.9 km^2).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 565.14 ft (172.255 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and those for periods of no gage-height record, June 4 to July 2 and Aug. 6 to Sept. 4, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--6 years, 23.5 ft^3/s (0.666 m^3/s), 9.85 in/yr (250 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,180 ft^3/s (147 m^3/s) May 13, 1978, gage height, 18.04 ft (5.499 m), from rating curve extended above 2,360 ft^3/s (66.8 m^3/s); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft^3/s (11 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 23	--	980	27.8	--	--	Apr. 12	0115	*2660	75.3	*17.19	5.240
Mar. 4	0600	1180	33.4	12.54	3.822	Apr. 26	1030	535	15.2	8.63	2.630
Mar. 19	1045	461	13.1	8.02	2.444	Aug. 1	1700	412	11.7	7.59	2.313

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.30	.68	8.0	.80	105	23	37	3.9	5.4	196	.35
2	.00	.21	.60	4.9	.78	137	22	36	3.5	1.5	41	.30
3	.16	.19	.83	3.5	.76	435	17	39	3.7	1.2	12	.25
4	.16	.29	.76	5.0	.74	683	22	25	3.9	2.1	5.4	.20
5	.09	.33	.69	6.5	.70	109	21	22	3.7	1.6	3.2	.17
6	.02	.41	.46	4.1	.65	77	15	21	3.5	1.1	2.5	.14
7	.07	.63	1.7	2.6	.64	91	17	18	3.3	1.0	1.7	.11
8	.02	.60	1.2	1.6	.64	56	18	16	20	.90	1.2	.11
9	.00	.59	.72	.84	.66	52	13	13	23	.90	.90	.07
10	.16	.61	.54	.74	.69	48	10	13	11	.89	.70	.08
11	.31	.51	.53	.72	.70	36	1080	12	5.7	.76	.50	.09
12	.31	.51	.65	.70	.70	38	1020	11	5.0	.69	.40	.13
13	.70	.51	.61	.68	.80	90	164	10	4.6	.79	.25	.13
14	.48	1.9	.48	.65	.80	73	112	10	3.6	3.2	.20	.08
15	.36	2.4	.39	.60	.88	43	85	8.8	3.5	1.1	.15	.02
16	.26	.98	.35	.64	1.0	33	63	7.8	3.3	.56	.10	.00
17	.18	2.9	.34	.70	1.1	31	46	7.9	3.0	.40	.10	.00
18	.18	3.6	.36	.98	1.5	33	39	7.9	2.8	.26	.05	.00
19	.14	1 3	.30	1.5	2.2	238	31	8.0	2.6	.16	.05	.00
20	.15	.74	.29	2.0	8.1	112	28	7.6	2.6	.17	8.0	.00
21	.14	.57	.28	1.7	35	71	27	6.9	2.8	.13	3.0	.00
22	.09	.52	.28	1.6	141	54	24	6.4	2.6	.13	.50	.00
23	.11	.78	.25	1.7	720	70	22	6.5	2.5	.18	.30	.00
24	.13	.58	.19	1.6	550	56	144	5.7	2.4	.49	.20	.00
25	.21	.65	.17	1.4	230	41	118	5.2	2.3	.56	.15	.00
26	.40	1.6	.16	1.2	150	35	292	5.4	2.0	.62	.10	.00
27	.35	2.5	.14	1.1	92	32	113	6.6	1.7	5.8	.10	.00
28	.48	2.1	.18	.90	98	31	74	5.2	1.6	2.9	.15	.00
29	.36	1.1	.96	.88	---	27	55	4.6	1.7	.98	2.0	.00
30	.34	.80	2.0	.88	---	26	42	4.5	2.5	20	.70	.00
31	.30	---	12	.80	---	24	---	4.4	---	64	.45	---
TOTAL	6.66	30.71	29.09	60.71	2040.84	2987	3757	392.4	138.3	120.47	282.05	2.23
MEAN	.21	1.02	.94	1.96	72.9	96.4	125	12.7	4.61	3.89	9.10	.074
MAX	.70	3.6	12	8.0	720	683	1080	39	23	64	196	.35
MIN	.00	.19	.14	.60	.64	24	10	4.4	1.6	.13	.05	.00
[illegible]	.006	.03	.03	.06	2.25	2.98	3.86	.39	.14	.12	.28	.002
[illegible]	.01	.04	.03	.07	2.34	3.43	4.31	.45	.16	.14	.32	.00

CAL YR 1978 TOTAL 10640.45 MEAN 29.2 MAX 1240 MIN .00 CFSM .90 IN 12.22
WTR YR 1979 TOTAL 9847.46 MEAN 27.0 MAX 1080 MIN .00 CFSM .83 IN 11.31

05576000 SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL

LOCATION.--Lat 39°44'32", long 89°34'02", in NE¼NW¼ sec.20, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, on right bank at city of Springfield dam, 100 ft (30 m) downstream from Horse Creek, 1.7 mi (2.7 km) southwest of Rochester, and at mile 7.4 (11.9 km).

DRAINAGE AREA.--867 mi^2 (2,246 km^2).

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.30 ft (155.844 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1964, water-stage recorder, and Oct. 1, 1964, to Apr. 12, 1966, nonrecording gage, at site 2.2 mi (3.5 km) downstream at same datum. Auxiliary water-stage recorder at site 1.2 mi (1.9 km) downstream. May 19, 1950, to Apr. 29, 1975, auxiliary nonrecording gage at same site. Prior to May 19, 1950, auxiliary nonrecording gage at site 6.2 mi (10.0 km) downstream.

REMARKS.--Records poor. Beginning Apr. 14, 1955, diversion above station for Springfield municipal supply during some years. Occasional regulation caused by operation of gate at diversion dam. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--30 years, 571 ft^3/s (16.17 m^3/s), 8.94 in/yr (227 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,100 ft^3/s (513 m^3/s) July 1, 1957, site than in use; maximum gage height, 31.92 ft (9.729 m) Apr. 14, 1979; minimum daily discharge, 0.07 ft^3/s (0.002 m^3/s) Dec. 6, 8, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,900 ft^3/s (422 m^3/s) Apr. 14; maximum gage height, 31.92 ft (9.729 m) Apr. 14; minimum daily discharge, 4.3 ft^3/s (0.12 m^3/s) July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	7.9	33	63	50	3310	1890	2500	137	25	1200	30
2	8.2	8.2	36	90	50	3700	1480	2180	124	23	1860	28
3	9.5	8.2	46	82	50	4200	1340	1690	114	22	2100	26
4	9.0	8.2	62	82	50	5100	1300	1230	111	21	2300	25
5	8.4	8.7	49	127	50	6500	1250	1080	113	21	1500	23
6	8.2	10	46	210	50	8000	1160	1050	115	18	900	20
7	8.2	11	46	269	50	9000	985	1010	116	17	700	18
8	7.6	11	46	150	50	8000	876	874	129	15	400	17
9	7.1	12	45	90	50	7000	811	789	186	14	300	17
10	7.1	12	51	75	50	5700	704	612	200	12	230	17
11	7.4	12	41	70	50	3500	1800	491	180	10	190	16
12	7.4	12	38	70	50	2500	7500	416	160	9.0	154	16
13	7.4	13	45	70	45	2000	11200	400	140	7.0	130	14
14	7.4	15	57	65	45	1500	14800	369	129	5.5	110	13
15	7.4	14	58	65	45	1200	13100	351	120	4.3	90	13
16	7.9	21	51	65	45	1000	9630	326	107	6.0	70	11
17	8.2	35	47	65	45	970	6480	323	103	8.0	60	11
18	8.2	40	43	60	45	1100	4900	311	98	7.0	50	11
19	7.9	52	39	60	45	2000	3570	288	85	6.0	43	10
20	7.4	56	38	60	50	2500	2340	276	79	5.0	48	9.8
21	7.1	54	36	60	70	2500	1330	231	70	4.5	50	9.0
22	7.1	47	36	60	130	2000	781	213	126	10	60	8.7
23	8.2	43	36	60	800	1500	586	199	154	30	89	8.2
24	8.4	39	33	60	1770	1500	500	180	116	100	140	7.9
25	9.0	36	34	60	2630	1640	1500	164	85	300	159	7.4
26	9.0	36	32	60	2300	2000	2000	153	69	500	126	6.8
27	7.4	34	34	60	2600	3000	2500	152	61	700	81	7.1
28	6.8	34	29	55	2900	3500	3000	153	48	540	55	6.8
29	6.3	34	28	55	---	3800	2610	151	30	400	45	6.8
30	6.1	34	36	55	---	3400	2700	148	28	350	38	6.6
31	6.8	---	45	55	---	2580	---	146	---	800	33	---
TOTAL	240.3	758.2	1296	2528	14165	106200	104623	18456	3333	3990.3	13311	421.1
MEAN	7.75	25.3	41.8	81.5	506	3426	3487	595	111	129	429	14.0
MAX	9.5	56	62	269	2900	9000	14800	2500	200	800	2300	30
MIN	6.1	7.9	28	55	45	970	500	146	28	4.3	33	6.6
CFSM	.009	.03	.05	.09	.58	3.95	4.02	.69	.13	.15	.50	.02
IN.	.01	.03	.06	.11	.61	4.56	4.49	.79	.14	.17	.57	.02

CAL YR 1978 TOTAL 269912.8 MEAN 739 MAX 8980 MIN 6.1 CFSM .85 IN 11.58
WTR YR 1979 TOTAL 269321.9 MEAN 738 MAX 14800 MIN 4.3 CFSM .85 IN 11.56

05576022 SOUTH FORK SANGAMON RIVER BELOW ROCHESTER, IL

LOCATION.--Lat 39°45'50", long 89°33'43", in NW¼SE¼ sec.8, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, at State Highway 29 bridge, 1.7 mi (2.7 km) northwest of Rochester, 1.8 mi (2.9 km) upstream from Black Branch, 2.2 mi (3.5 km) downstream from Horse Creek, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--870 mi^2 (2,253 km^2), revised.

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EO 01.

REMARKS.--Water discharges were determined from South Fork Sangamon River near Rochester (station 05576000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
17...	1000	17002	17002	8.2	785	7.7	9.0	9.5	9.3	26
NOV										
13...	1000	17002	17002	13	950	7.6	20.0	13.5	--	29
DEC										
05...	1000	17002	17002	49	730	7.9	10.0	2.0	--	22
JAN										
03...	1100	17002	17002	82	830	7.8	-14.5	.5	14.0	20
FEB										
13...	1100	17002	17002	45	870	8.0	-2.0	1.0	5.8	12
MAR										
20...	1100	17002	17002	2500	370	7.9	9.0	10.0	9.4	108
APR										
17...	1000	17002	17002	6480	180	7.8	18.0	13.5	8.6	111
17...	1100	17002	17002	6480	180	7.9	19.0	13.5	8.6	107
MAY										
16...	1100	17002	17002	326	560	7.8	20.0	18.0	7.4	13
JUN										
14...	1000	17002	17002	129	495	7.7	27.0	23.0	5.4	24
JUL										
10...	1000	17002	17002	12	650	8.2	28.0	24.5	6.8	26
AUG										
16...	1100	17002	17002	70	600	7.8	21.0	20.0	7.1	13
SEP										
12...	1000	17002	17002	16	750	7.8	26.0	23.0	6.3	19

05576022 SOUTH FORK SANGAMON RIVER BELOW ROCHESTER, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT									
17...	30	.0	188	--	--	57	12	.00	.00
NOV									
13...	--	.0	203	141	--	46	5	--	.00
DEC									
05...	72	.0	139	109	64	13	3	1.0	.30
JAN									
03...	1100	.0	161	103	80	16	3	2.4	.90
FEB									
13...	--	.0	175	101	86	3	0	2.0	1.3
MAR									
20...	K1500	.0	32	59	28	784	80	5.9	.20
APR									
17...	K300	.0	26	44	19	776	108	3.7	.10
17...	400	.0	24	44	19	768	120	3.6	.10
MAY									
16...	K140	.0	135	63	--	109	10	7.1	.00
JUN									
14...	K100	.0	117	48	--	183	18	4.1	.10
JUL									
10...	K150	.0	199	--	--	93	15	2.0	.00
AUG									
16...	K120	.0	169	63	--	87	5	2.1	.00
SEP									
12...	250	.0	162	76	--	67	7	.30	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT									
17...	1.0	1.0	1.0	0	1760	0	470	.0	0
NOV									
13...	1.0	1.0	--	--	--	--	--	--	--
DEC									
05...	.60	.90	1.9	0	2100	0	110	.0	20
JAN									
03...	--	--	--	0	1460	0	140	.0	--
FEB									
13...	--	--	--	0	800	10	150	.0	0
MAR									
20...	--	--	--	20	13000	0	630	.0	90
APR									
17...	--	--	--	30	6000	0	450	.0	50
17...	--	--	--	30	4800	0	370	.0	30
MAY									
16...	--	--	--	0	1600	0	200	.0	10
JUN									
14...	--	--	--	10	3700	0	400	.1	0
JUL									
10...	--	--	--	0	1700	0	400	.1	10
AUG									
16...	--	--	--	10	1800	0	530	.0	30
SEP									
12...	--	--	--	0	1400	0	410	.0	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05576250 SUGAR CREEK NEAR SPRINGFIELD, IL

LOCATION.--Lat 39°46'48", long 89°35'20", in SW¼NW¼ sec.6, T.15 N., R.4 W., Sangamon County, Hydrologic Unit 07130007, 1.9 mi (3.1 km) east of Springfield, 2.9 mi (4.7 km) downstream from Lake Springfield Oam, and at mile 5.5 (8.8 km).

ORAINAGE AREA.--270 mi^2 (699 km^2).

PERIOO OF RECORD.--April to September 1979. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EOA 01.

WATER QUALITY OATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (OEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
APR								
09...	1600	17002	17002	360	8.5	6.0	9.0	10.3
MAY								
03...	0900	17002	17002	300	7.9	12.0	10.0	8.6
03...	1000	17002	17002	295	7.9	12.0	15.0	9.5
JUN								
12...	1000	17002	17002	470	7.8	24.5	21.0	6.8
26...	1000	17002	17002	490	8.2	24.5	22.0	6.5
AUG								
15...	1000	17002	17002	445	8.1	18.5	20.0	6.2
30...	1000	17002	17002	490	8.2	26.5	24.5	5.9

DATE	OXYGEN OEMANO, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)	COLI-FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE OIS-SOLVEO (MG/L AS SO4) (00945)	CHLO-RIOE, OIS-SOLVED (MG/L AS CL) (00940)	SOLIOS, RESIOUE AT 105 OEG. C, SUS-PENDED (MG/L) (00530)	SOLIOS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
APR									
09...	12	--	49	19	21	4	2.2	.30	.50
MAY									
03...	27	500	40	16	71	5	3.9	.10	1.0
03...	26	K100	40	16	63	4	4.1	.10	1.0
JUN									
12...	10	8300	96	18	82	9	3.8	.10	.60
26...	3	300	103	17	36	4	3.9	.00	.70
AUG									
15...	12	270	100	19	40	4	1.0	.10	.70
30...	15	K100	101	21	81	15	.40	.10	.60

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
APR								
09...	.80	3.0	.14	--	--	0	--	0
MAY								
03...	1.1	5.0	.31	--	--	0	--	--
03...	1.1	5.2	.31	--	--	0	--	--
JUN								
12...	.70	4.5	.15	--	--	0	--	--
26...	.70	4.6	.11	0	940	0	--	--
AUG								
15...	.80	1.8	.11	10	1300	100	230	--
30...	.70	1.1	.11	0	1200	0	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05576500 SANGAMON RIVER AT RIVERTON, IL

LOCATION.--Lat 39°50'34", long 89°32'52", in NE¼ sec.16, T.16 N., R.4 W., Sangamon County, Hydrologic Unit 07130008, at bridge on county road, 0.6 mi (1.0 km) southwest of Riverton, 2.2 mi (3.5 km) downstream from Sugar Creek, 5.6 mi (9.0 km) upstream from Fancy Creek, and at mile 83.1 (133.7 km).

DRAINAGE AREA.--2,618 mi^2 (6,781 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
16...	1600	17002	17002	77	1015	8.2	13.5	11.5	--	26	--
19...	1330	80010	--	79	--	--	16.5	13.0	--	--	--
NOV											
21...	1000	17002	17002	132	1008	8.2	2.0	5.5	7.7	24	62
29...	1145	80010	--	147	--	--	6.0	4.0	--	--	--
DEC											
19...	1100	17002	17002	214	765	8.4	3.5	3.5	10.3	17	K26
JAN											
09...	1100	17002	17002	400	1000	8.4	-10.0	3.0	10.2	52	230
23...	1300	80010	--	267	--	--	.0	.5	--	--	--
FEB											
07...	1100	17002	17002	280	1240	8.2	-15.5	.0	4.8	22	K2
MAR											
13...	1000	17002	17002	13000	340	7.9	12.0	2.0	12.5	20	340
APR											
24...	0900	17002	17002	4870	460	--	18.0	15.5	8.2	29	2300
24...	1000	17002	17002	4870	470	8.2	18.0	15.0	8.4	28	3800
MAY											
24...	1100	17002	17002	1120	660	8.1	19.0	20.5	7.3	21	K800
JUN											
13...	1500	80010	--	915	--	--	24.5	20.0	--	--	--
21...	1000	17002	17002	853	670	8.0	29.0	24.5	5.7	22	340
JUL											
16...	1400	17002	17002	685	610	8.0	28.0	26.5	--	29	--
AUG											
14...	1000	17002	17002	860	570	7.8	18.5	21.5	5.8	16	370
SEP											
11...	1000	17002	17002	154	890	8.5	25.5	21.0	7.2	35	K200
18...	1715	80010	--	--	--	--	24.0	22.0	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05576500 SANGAMON RIVER AT RIVERTON, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT											
16...	.0	238	149	215	13	--	3.1	1.0	1.4	2.4	5.5
NOV											
21...	.0	187	149	120	13	3	1.4	.60	.80	1.4	2.8
DEC											
19...	.0	190	83	68	8	3	1.4	1.0	.60	1.6	3.0
JAN											
09...	.0	186	64	56	270	22	1.9	.60	--	--	--
FEB											
07...	.0	284	132	160	5	1	1.5	3.4	--	--	--
MAR											
13...	.0	279	36	18	72	11	5.9	.10	--	--	--
APR											
24...	.0	112	46	26	186	24	6.2	.10	--	--	--
24...	.0	118	47	25	189	21	6.3	.10	--	--	--
MAY											
24...	--	186	62	41	66	4	7.9	.10	--	--	--
JUN											
21...	.0	190	61	44	94	13	5.5	.10	--	--	--
JUL											
16...	.0	147	63	53	41	8	2.6	.40	--	--	--
AUG											
14...	.0	175	50	36	59	8	.20	.20	--	--	--
SEP											
11...	.0	208	101	98	69	10	1.4	.00	--	--	--

DATE	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT											
16...	--	--	0	0	0	490	0	420	.0	0	0
NOV											
21...	--	1	0	0	0	400	0	360	.0	0	0
DEC											
19...	.72	0	0	0	0	540	0	120	.0	--	0
JAN											
09...	--	2	0	0	0	4500	60	870	.0	--	0
FEB											
07...	--	2	0	0	0	480	0	230	.0	20	0
MAR											
13...	--	1	0	0	10	1900	0	90	.0	20	0
APR											
24...	--	1	0	0	30	3900	0	220	.0	30	0
24...	--	1	0	10	20	4500	0	240	.0	30	0
MAY											
24...	--	2	0	0	10	1200	0	160	.0	40	0
JUN											
21...	--	9	0	0	20	2100	0	230	.1	20	--
JUL											
16...	--	2	0	0	0	470	0	140	.0	0	0
AUG											
14...	--	3	0	0	10	1200	0	280	.1	22	0
SEP											
11...	--	5	0	0	10	1000	0	320	.1	10	0

05577500 SPRING CREEK AT SPRINGFIELD, IL

LOCATION.--Lat 39°48'57", long 89°41'57", in NW¼NE¼ sec.30, T.16 N., R.5 W., Sangamon County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highway 125 in Springfield, 0.8 mi (1.3 km) downstream from Chicago and North Western Railroad bridge, 1.9 mi (3.1 km) west of intersection of Jefferson Street and MacArthur Boulevard, and at mile 8.2 (13.2 km).

DRAINAGE AREA.--107 mi^2 (277 km^2).

PERIOD OF RECORD.--January to September 1948, December 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 524.65 ft (159.913 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 22, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods and those for period of no gage-height record Apr. 3-11, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--30 years (water years 1950-79), 64.2 ft^3/s (1.818 m^3/s), 8.15 in/yr (207 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,750 ft^3/s (191 m^3/s) Mar. 30, 1960, gage height, 12.70 ft (3.871 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 24	0600	1190	33.7	9.26	2.822	Apr. 11	unknown	*5290	150	*12.05	3.673
Mar. 3	2145	1700	48.1	9.76	2.975	Aug. 1	0945	693	19.6	8.56	2.609

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.06	1.0	17	.65	138	91	112	20	3.8	427	.82
2	2.0	.01	.91	10	.60	200	89	124	20	3.5	369	.73
3	20	.02	6.3	4.0	.55	1060	75	258	21	4.0	120	.57
4	3.0	.04	2.4	2.5	.50	1160	70	168	21	8.0	72	.44
5	.60	.02	1.9	2.0	.50	393	65	120	21	5.0	51	.38
6	.00	.00	1.7	1.5	.50	129	60	107	20	3.0	38	.32
7	.00	.23	4.8	1.0	.50	139	55	97	23	2.5	29	.20
8	.00	.32	3.4	1.3	.50	91	50	86	24	2.0	23	.14
9	.00	.20	1.1	1.2	.45	82	45	77	30	1.8	19	.09
10	.00	.17	.73	1.1	.45	70	40	72	22	1.6	16	.06
11	.00	.14	1.1	1.0	.45	58	2400	67	18	1.4	14	.04
12	.00	.09	2.7	.90	.60	71	3350	64	17	1.2	12	.01
13	.00	.12	3.1	.80	.70	194	826	66	15	10	9.2	.00
14	.00	3.1	1.3	.70	.82	196	446	57	15	30	7.3	.00
15	.00	.73	1.3	.60	.91	91	311	49	14	8.0	6.0	.00
16	.00	.12	1.3	.60	1.1	73	214	47	13	3.0	5.4	.00
17	.00	23	1.0	.70	1.0	71	165	45	12	1.5	4.6	.00
18	.07	2.7	2.7	1.0	.82	146	138	43	13	1.0	3.6	.00
19	.02	.91	2.4	.90	.91	466	123	41	12	.73	3.8	.00
20	.00	.57	2.6	1.5	.91	254	115	38	17	.57	31	.00
21	.00	.65	2.4	2.5	51	149	126	34	14	.44	22	.00
22	.00	.82	2.4	2.0	237	124	109	32	12	.27	5.4	.00
23	.00	1.1	1.7	1.7	633	135	101	31	11	.50	3.4	.00
24	.09	1.2	1.6	1.6	721	119	291	28	10	45	2.7	.00
25	1.7	.82	1.1	1.3	362	107	295	28	9.0	48	2.0	.00
26	14	5.4	1.0	1.1	176	98	421	34	8.0	29	1.5	.00
27	2.4	8.0	.73	1.0	116	96	383	30	7.0	67	1.3	.00
28	.57	1.9	.65	1.0	125	128	222	26	6.0	111	1.0	.00
29	.23	1.2	38	.82	---	123	154	24	5.0	34	2.4	.00
30	.17	1.2	45	.82	---	115	130	23	4.3	45	1.3	.00
31	.38	---	34	.82	---	100	---	23	---	311	1.0	---
TOTAL	45.23	54.84	172.32	64.96	2434.42	6376	10960	2051	454.3	783.81	1304.9	3.80
MEAN	1.46	1.83	5.56	2.10	86.9	206	365	66.2	15.1	25.3	42.1	.13
MAX	20	23	45	17	721	1160	3350	258	30	311	427	.82
MIN	.00	.00	.65	.60	.45	58	40	23	4.3	.27	1.0	.00
CFSM	.01	.02	.05	.02	.81	1.93	3.41	.62	.14	.24	.39	.001
IN.	.02	.02	.06	.02	.85	2.22	3.81	.71	.16	.27	.45	.00

CAL YR 1978 TOTAL 26650.69 MEAN 73.0 MAX 1370 MIN .00 CFSM .68 IN 9.27
WTR YR 1979 TOTAL 24705.58 MEAN 67.7 MAX 3350 MIN .00 CFSM .63 IN 8.59

05577505 SPRING CREEK AT BURNS LANE BRIDGE AT SPRINGFIELD, IL

LOCATION.--Lat 39°49'16", long 89°41'16", in SW¼ sec.20, T.16 N., R.5 W., Sangamon County, Hydrologic Unit 07130008, at bridge on Burns Lane at northwest side of Springfield, 1.6 mi (2.6 km) downstream from Jacksonville Branch, 5.8 mi (9.3 km) upstream from Spring Creek tributary, and at mile 6.7 (10.8 km).

DRAINAGE AREA.--109 mi^2 (282 km^2).

PERIOD OF RECORD.--April to September 1979.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
APR										
19...	0900	17002	17002	124	625	8.3	15.5	11.5	9.3	13
MAY										
17...	0900	17002	17002	45	625	8.2	20.0	16.5	7.7	13
JUN										
19...	0900	17002	17002	11	620	7.8	27.0	23.5	.8	17
JUL										
12...	0900	17002	17002	1.3	590	7.8	26.5	24.0	.8	29
AUG										
28...	1000	17002	17002	1.0	580	7.2	21.0	21.5	.0	117
SEP										
26...	0900	17002	17002	.00	--	--	--	16.5	1.1	65

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR										
19...	560	56	24	75	7	10	.20	.19	0	0
MAY										
17...	360	54	22	77	8	9.7	.10	.15	0	--
JUN										
19...	60000	53	25	11	2	4.4	1.6	.85	0	--
JUL										
12...	3900	48	24	74	6	.70	.90	.52	0	--
AUG										
28...	<10	48	33	110	46	.00	7.4	3.9	<50	0
SEP										
26...	K170	23	26	35	23	.10	6.4	.82	0	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05578000 SANGAMON RIVER AT PETERSBURG, IL

LOCATION.--Lat 40°00'37", long 89°50'42", in NW¼ sec.13, T.18 N., R.7 W., Menard County, Hydrologic Unit 07130008, at bridge on State Highway 23 at east edge of Petersburg, 2.8 mi (4.5 km) upstream from Indian Creek, 2.9 mi (4.7 km) downstream from Rocky Branch, and at mile 45.9 (73.9 km).

DRAINAGE AREA.--3,063 mi² (7,933 km²).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
02...	1100	17002	17002	88	880	8.4	18.0	19.0	--	37
18...	1400	80010	--	92	--	--	19.5	12.5	--	--
NOV										
08...	1100	17002	17002	163	1300	7.7	11.0	10.0	--	25
28...	0930	80010	--	252	--	--	-4.0	4.5	--	--
DEC										
04...	1100	17002	17002	215	1020	8.1	3.5	3.0	--	3
JAN										
02...	1100	17002	17002	--	930	8.0	-14.5	--	12.4	26
FEB										
05...	1300	17002	17002	230	980	8.4	-14.5	.0	7.8	18
21...	1300	80010	--	217	--	--	3.5	.5	--	--
MAR										
05...	1700	80010	--	--	--	--	1.0	1.0	--	--
06...	1200	17002	17002	13100	300	8.4	1.0	1.0	11.6	44
06...	1400	80010	--	13400	--	--	1.0	1.0	--	--
APR										
02...	1000	17002	17002	8650	500	8.2	3.5	8.0	9.8	16
02...	1200	17002	17002	8610	495	8.2	3.5	8.0	9.8	17
19...	0845	80010	--	22200	--	--	15.0	13.5	--	--
30...	1000	17002	17002	9800	445	8.0	11.0	11.5	10.6	22
JUN										
06...	1545	80010	--	655	--	--	31.0	24.5	--	--
11...	1000	17002	17002	655	590	8.0	24.0	23.0	--	23
25...	1100	17002	17002	--	650	9.0	23.5	22.0	--	24
JUL										
23...	1100	17002	17002	728	610	8.3	30.5	26.5	--	21
SEP										
10...	1100	17002	17002	216	690	8.9	24.5	22.0	--	27
19...	1015	80010	--	--	--	--	21.0	20.0	--	--

05578000 SANGAMON RIVER AT PETERSBURG, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
02...	.0	208	96	89	92	14	1.3	.00	2.1	2.1
NOV										
08...	.0	208	157	160	28	6	3.4	.10	--	--
DEC										
04...	.0	188	121	120	17	3	3.2	.50	.90	1.4
JAN										
02...	.0	177	102	112	27	6	2.1	2.3	--	--
FEB										
05...	.0	268	96	112	4	2	2.2	1.7	--	--
MAR										
06...	.0	52	37	20	196	30	3.0	.30	--	--
APR										
02...	.0	132	50	28	75	8	8.0	.10	--	--
02...	.0	132	51	28	79	9	7.9	.10	--	--
30...	.0	114	49	22	138	17	7.0	.10	--	--
JUN										
11...	.0	158	60	39	88	4	5.1	.20	--	--
25...	.0	204	63	47	73	14	3.5	.00	--	--
JUL										
23...	.0	182	61	44	46	2	2.0	.00	--	--
SEP										
10...	.0	209	73	61	41	11	1.7	.00	--	--

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT									
02...	3.4	--	0	700	7	500	.0	10	0
NOV									
08...	--	--	20	470	0	380	.0	10	0
DEC									
04...	4.6	--	0	630	0	250	.0	150	0
JAN									
02...	--	--	20	700	0	200	.0	--	--
FEB									
05...	--	1.1	0	330	0	160	.0	10	0
MAR									
06...	--	--	20	5600	0	340	.0	40	0
APR									
02...	--	--	0	450	0	70	.0	10	0
02...	--	--	10	5200	0	70	.0	10	0
30...	--	--	10	3100	0	150	.0	20	0
JUN									
11...	--	--	10	2600	0	290	.2	0	0
25...	--	--	10	1200	0	300	.3	10	0
JUL									
23...	--	--	0	700	0	300	.0	20	0
SEP									
10...	--	--	10	740	0	280	.2	30	0

05578500 SALT CREEK NEAR ROWELL, IL

LOCATION.--Lat 40°06'54", long 89°02'57", in NE¼SE¼ sec.11, T.19 N., R.1 E., De Witt County, Hydrologic Unit 07130009, on right bank at downstream side of highway bridge, 0.5 mi (0.8 km) upstream from State Highway 54, 0.8 mi (1.3 km) upstream from Illinois Central Gulf Railroad bridge and Ten Mile Creek, 3.2 mi (5.1 km) northwest of Rowell, and at mile 65.3 (105.1 km).

DRAINAGE AREA.--335 mi^2 (868 km^2).

WATER-DISCHARGE RECORDS

ERIOD OF RECORD.--October 1942 to current year.

EVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.00 ft (185.928 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Water-discharge records good except those for winter periods, which are poor. Beginning Oct. 12, 1977, flow partially regulated by Clinton Reservoir 11 mi (18 km) upstream from gage.

AVERAGE DISCHARGE.--35 years (water years 1943-77), 237 ft^3/s (6.712 m^3/s), 9.61 in/yr (244 mm/yr), prior to construction of Clinton Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft^3/s (694 m^3/s) May 16, 1968, gage height, 29.21 ft (8.903 m); minimum, 0.7 ft^3/s (0.020 m^3/s) Oct. 4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,140 ft^3/s (202 m^3/s) Mar. 5, gage height, 22.76 ft (6.937 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.4	11	67	40	250	1840	1070	118	33	736	63
2	9.6	10	11	96	40	300	1690	915	114	33	956	55
3	17	11	29	79	40	700	1440	1160	108	34	1090	50
4	11	10	16	60	40	5080	1300	1130	101	59	1030	48
5	10	11	12	50	40	6650	1140	1100	94	77	814	42
6	10	13	12	45	40	4650	914	957	99	66	618	36
7	10	17	20	45	35	3370	832	814	90	60	488	32
8	10	14	16	40	35	3010	792	697	94	55	390	28
9	9.6	13	14	40	35	2640	727	622	142	51	322	24
10	10	13	12	35	35	2280	654	554	161	50	261	18
11	14	12	11	35	35	1950	2060	486	173	49	242	14
12	12	12	10	35	30	1510	5960	437	171	49	188	14
13	11	12	12	40	30	1230	6010	387	161	46	147	13
14	11	17	13	50	30	1170	4120	356	144	51	125	16
15	14	13	12	60	30	1090	2940	343	120	89	110	12
16	9.3	12	11	50	30	985	2330	309	110	107	95	11
17	10	23	11	45	25	834	1920	278	101	105	77	10
18	9.0	16	11	45	25	746	1560	253	108	91	65	10
19	7.0	11	11	45	25	1180	1240	236	100	78	71	9.3
20	8.0	10	14	50	25	1370	984	226	85	68	71	11
21	8.6	11	10	45	35	1660	792	222	81	61	67	10
22	7.4	11	9.0	40	50	1580	910	206	76	54	70	12
23	8.0	16	9.0	40	300	1450	592	185	78	50	77	12
24	9.3	13	9.0	45	500	1620	656	186	70	63	97	9.6
25	13	11	8.0	45	450	1460	811	168	56	200	109	9.3
26	15	11	8.0	45	400	1330	1240	149	48	283	108	9.6
27	10	17	8.0	40	350	1190	1380	152	42	378	100	9.6
28	12	13	9.0	40	300	1180	1580	143	39	400	91	9.3
29	7.8	11	18	40	---	1370	1450	140	36	364	79	9.6
30	8.7	11	64	40	---	1810	1250	130	33	323	74	10
31	9.4	---	49	40	---	1960	---	128	---	421	70	---
TOTAL	322.7	384.4	470.0	1472	3050	57605	51114	14139	2953	3848	8838	617.3
MEAN	10.4	12.8	15.2	47.5	109	1858	1704	456	98.4	124	285	20.6
MAX	17	23	64	96	500	6650	6010	1160	173	421	1090	63
MIN	7.0	9.4	8.0	35	25	250	592	128	33	33	65	9.3

CAL YR 1978 TOTAL 41769.1 MEAN 114 MAX 736 MIN 7.0
WTR YR 1979 TOTAL 144813.4 MEAN 397 MAX 6650 MIN 7.0

05578500 SALT CREEK NEAR ROWELL, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	STREAM-FLOW (CFS) (00060)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)
OCT									
24...	1200	17002	17002	--	9.3	750	7.9	10.0	10.0
25...	1500	80010	--	--	12	--	--	15.0	12.0
NOV									
20...	1115	80010	--	--	9.9	--	--	3.0	6.0
28...	1000	17002	17002	--	13	835	8.1	-4.5	--
DEC									
19...	1400	17002	17002	--	11	810	8.7	3.0	3.0
JAN									
17...	1100	17002	17002	45	--	600	8.8	-1.5	1.5
31...	1530	80010	--	--	40	--	--	-14.0	.5
FEB									
21...	1300	17002	17002	35	--	650	8.7	3.5	1.0
27...	1245	80010	--	--	354	--	--	2.0	1.0
MAR									
16...	1300	17002	17002	--	979	290	8.0	10.0	4.5
APR									
06...	1100	17002	17002	--	905	420	8.2	3.0	--
06...	1200	17002	17002	--	903	410	8.2	3.0	6.5
09...	1200	80010	--	--	738	--	--	4.0	6.5
MAY									
07...	1100	17002	17002	--	825	420	8.1	21.0	16.0
JUN									
11...	1500	17002	17002	--	177	470	8.3	25.5	23.5
11...	1600	17002	17002	--	176	470	8.3	25.5	23.5
JUL									
20...	1000	17002	17002	--	69	460	--	25.0	22.0
AUG									
08...	1300	17002	17002	--	387	440	7.5	31.5	25.5
SEP									
18...	1200	17002	17002	--	9.9	660	8.6	25.5	20.0
20...	1445	80010	--	--	11	--	--	23.0	18.5

05578500 SALT CREEK NEAR ROWELL, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT								
24...	--	18	92	--	12	1	1.2	.00
NOV								
28...	11.2	20	K1040	76	58	5	3.3	.20
DEC								
19...	13.9	16	K60	70	10	1	2.4	.20
JAN								
17...	12.0	18	<10	33	14	4	1.4	.20
FEB								
21...	12.4	16	K20	42	6	2	1.9	.40
MAR								
16...	13.2	13	K150	19	95	9	7.4	.10
APR								
06...	12.2	12	K160	15	38	3	3.6	.20
06...	12.2	13	230	15	43	6	3.6	.20
MAY								
07...	--	11	K1200	--	46	3	5.7	.00
JUN								
11...	--	12	--	--	59	4	6.0	.00
11...	--	12	--	--	58	6	5.9	.00
JUL								
20...	7.1	18	K100	--	140	10	5.0	.00
AUG								
08...	6.8	15	240	--	78	6	4.6	.00
SEP								
18...	9.1	13	K370	--	31	5	2.9	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT								
24...	.70	.70	1.9	--	30	320	--	--
NOV								
28...	.90	1.1	4.4	--	0	130	220	--
DEC								
19...	.70	.90	3.3	--	180	500	--	--
JAN								
17...	--	--	--	--	30	320	--	--
FEB								
21...	--	--	--	--	40	280	--	--
MAR								
16...	--	--	--	--	0	1600	--	--
APR								
06...	--	--	--	--	0	610	--	--
06...	--	--	--	--	10	760	--	--
MAY								
07...	--	--	--	--	10	890	--	--
JUN								
11...	--	--	--	--	10	1100	--	--
11...	--	--	--	--	0	1100	--	--
JUL								
20...	--	--	--	.18	10	2100	--	--
AUG								
08...	--	--	--	--	0	1300	--	0
SEP								
18...	--	--	--	--	0	650	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05579500 LAKE FORK NEAR CORNLAND, IL

LOCATION.--Lat 39°57'00", long 89°23'10", in SW¼ sec.1, T.17 N., R.3 W., Logan County, Hydrologic Unit 07130009, near center of span on upstream side of bridge on State Highway 54, 100 ft (30 m) upstream from Illinois Central Gulf Railroad bridge, 2.0 mi (3.2 km) northeast of Cornland, 8 mi (13 km) downstream from Jones Fork, and at mile 12.9 (20.8 km).

DRAINAGE AREA.--214 mi^2 (554 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 555.06 ft (169.182 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1973, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods and those for period of no gage-height record, Dec. 11 to Jan. 22, which are poor.

AVERAGE DISCHARGE.--31 years, 146 ft^3/s (4.135 m^3/s), 9.26 in/yr (235 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,930 ft^3/s (253 m^3/s) Apr. 12, 1979, gage height, 23.11 ft (7.044 m); minimum, 1.3 ft^3/s (0.037 m^3/s) Sept. 14-17, 19, 24, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 23.4 ft (7.13 m), from floodmarks, discharge, 29,000 ft^3/s (821 m^3/s), by contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	Unknown	3550	101	[a]19.16	5.840	Apr. 12	1300	*8930	253	*23.11	7.044
Mar. 20	0030	1220	34.6	13.57	4.136	Apr. 26	1800	1090	30.9	12.86	3.920
Mar. 24	2145	1200	34.0	13.44	4.097						

[a]From Floodmark.

Minimum discharge, 7.6 ft^3/s (0.22 m^3/s) Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	15	200	19	740	632	421	87	35	274	16
2	12	11	15	130	19	1500	589	388	83	34	608	16
3	15	11	19	100	18	2400	532	504	84	34	380	15
4	13	11	21	80	18	3350	500	444	82	33	236	14
5	13	11	23	60	17	3200	477	391	81	32	162	13
6	12	13	23	50	17	2660	417	358	77	30	122	13
7	12	12	22	40	16	1960	377	321	74	29	100	12
8	12	11	30	35	16	1720	428	291	72	28	81	12
9	12	11	34	30	15	1100	425	261	67	27	68	12
10	12	10	32	25	15	757	367	241	64	26	59	11
11	14	9.8	28	23	16	595	1480	227	64	25	55	12
12	14	9.8	25	22	17	517	6730	209	61	25	49	11
13	13	11	23	21	18	612	4520	196	59	33	45	11
14	13	12	22	21	19	778	2530	186	58	86	41	10
15	15	11	21	20	20	621	1540	171	57	46	40	10
16	14	9.9	20	23	19	514	1010	160	54	35	37	9.4
17	13	14	20	25	18	475	683	154	53	30	34	9.4
18	12	14	19	27	17	476	558	152	51	29	32	9.4
19	11	12	18	29	16	999	488	149	49	28	36	9.0
20	10	11	20	30	15	1100	439	141	48	26	38	9.0
21	11	11	18	29	20	793	403	132	47	25	34	8.6
22	10	12	16	29	25	654	369	126	47	23	30	8.6
23	10	13	16	28	350	654	341	124	47	22	28	8.6
24	11	13	15	27	600	1020	481	116	46	32	26	8.3
25	14	12	15	25	700	1050	672	112	44	77	24	8.3
26	15	13	15	24	550	807	964	111	42	45	22	8.3
27	13	16	14	23	400	704	840	113	40	32	22	7.9
28	12	16	14	22	400	669	647	103	41	97	21	7.9
29	11	15	20	21	---	728	546	97	40	54	20	7.6
30	11	16	60	20	---	734	480	95	36	41	19	7.9
31	11	---	250	20	---	720	---	92	---	93	18	---
TOTAL	384	363.5	903	1259	3390	34607	30465	6586	1755	1212	2761	316.2
MEAN	12.4	12.1	29.1	40.6	121	1116	1016	212	58.5	39.1	89.1	10.5
MAX	15	16	250	200	700	3350	6730	504	87	97	608	16
MIN	10	9.8	14	20	15	475	341	92	36	22	18	7.6
CFSM	.06	.06	.14	.19	.57	5.22	4.75	.99	.27	.18	.42	.05
IN.	.07	.06	.16	.22	.59	6.02	5.30	1.14	.31	.21	.48	.05

CAL YR 1978 TOTAL 59386.5 MEAN 163 MAX 1510 MIN 9.8 CFSM .76 IN 10.32
WTR YR 1979 TOTAL 84001.7 MEAN 230 MAX 6730 MIN 7.6 CFSM 1.08 IN 14.60

05579500 LAKE FORK NEAR CORNLAND, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EIG 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
19...	1550	80010	--	12	--	--	17.5	9.5	--	--
24...	1100	17002	17002	11	710	8.0	10.0	9.0	10.2	9
NOV										
21...	1100	17002	17002	11	730	8.2	1.0	4.0	12.3	12
21...	1300	80010	--	11	--	--	1.5	4.5	--	--
DEC										
19...	1200	17002	17002	18	690	8.7	3.5	3.0	13.3	8
JAN										
09...	1200	17002	17002	30	780	8.6	-1.0	.0	11.9	6
23...	1145	80010	--	28	--	--	.0	.5	--	--
FEB										
07...	1300	17002	17002	16	690	8.4	-12.0	1.0	10.2	5
MAR										
01...	1300	80010	--	739	--	--	2.5	1.5	--	--
07...	1000	80010	--	1970	--	--	.0	4.0	--	--
13...	1200	17002	17002	612	600	7.9	12.0	4.5	10.6	15
APR										
12...	1315	80010	--	8980	--	--	20.5	12.5	--	--
24...	1100	17002	17002	484	572	7.8	20.0	14.0	9.2	50
24...	1200	17002	17002	481	550	7.8	20.0	13.5	9.6	47
MAY										
24...	1200	17002	17002	107	675	7.9	21.0	14.5	9.8	6
JUN										
06...	1130	80010	--	78	--	--	30.0	22.0	--	--
21...	1100	17002	17002	47	685	8.1	31.0	24.0	7.9	3
JUL										
16...	1200	17002	17002	35	670	8.0	29.0	24.5	--	14
AUG										
14...	1200	17002	17002	41	680	8.1	19.5	19.0	8.2	6
SEP										
11...	1200	17002	17002	11	670	8.1	25.5	23.5	10.2	9
11...	1500	80010	--	11	--	--	29.0	27.0	--	--

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./ 100 ML) (31616)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
OCT											
24...	630	--	17	2	.60	.00	.40	.40	1.0	10	420
NOV											
21...	--	34	12	10	1.4	.20	.50	.70	2.1	0	1100
DEC											
19...	K130	21	6	3	2.1	.10	.50	.60	2.7	0	500
JAN											
09...	K190	21	17	0	4.4	.20	--	--	--	0	200
FEB											
07...	38	23	8	2	3.1	.50	--	--	--	0	350
MAR											
13...	290	17	227	16	7.3	.10	--	--	--	10	3000
APR											
24...	2600	17	508	24	7.4	.10	--	--	--	20	870
24...	3400	17	470	30	7.2	.10	--	--	--	20	840
MAY											
24...	<10	--	62	2	7.6	.00	--	--	--	10	960
JUN											
21...	260	--	44	6	5.1	.00	--	--	--	10	780
JUL											
16...	--	--	73	10	3.5	.20	--	--	--	20	820
AUG											
14...	380	--	27	3	3.5	.00	--	--	--	0	630
SEP											
11...	K600	--	12	3	.10	.00	--	--	--	0	520

K Results based on colony count outside the acceptable range (non-ideal colony count).

05580000 KICKAPOO CREEK AT WAYNESVILLE, IL

LOCATION.--Lat 40°15'20", long 89°07'40", on line between secs.19 and 20, T.21 N., R.1 E., De Witt County, Hydrologic Unit 07130009, near center of span on downstream side of bridge, 0.5 mi (0.8 km) downstream from Rock Creek, 0.7 mi (1.1 km) north of Waynesville on Waynesville-McLean Road, and at mile 25.3 (40.7 km).

DRAINAGE AREA.--227 mi^2 (588 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1948 to current year.

REVISED RECORDS.--WSP 1175: 1948-49.

GAGE.--Water-stage recorder. Datum of gage is 620.24 ft (189.049 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 8, 1970, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--31 years, 152 ft^3/s (4.305 m^3/s), 9.09 in/yr (231 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,400 ft^3/s (606 m^3/s) Apr. 11, 1979, gage height, 16.55 ft (5.044 m); minimum, 0.1 ft^3/s (0.003 m^3/s) Oct. 23, 25, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 4	1045	15400	436	15.82	4.822	Apr. 11	2200	*21400	606	*16.55	5.044
Mar. 7	0730	2220	62.9	12.08	3.682	Apr. 26	1200	1790	50.7	10.97	3.344
Mar. 19	2230	2000	56.6	11.60	3.536	May 3	0445	1720	48.7	10.73	3.271
Mar. 29	0315	1910	54.1	11.38	3.469						

Minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.8	10	110	6.5	330	736	414	87	32	185	9.0
2	3.2	6.5	10	142	6.5	600	642	429	81	29	209	8.5
3	4.7	6.1	14	44	6.5	2200	547	1520	81	37	139	8.2
4	7.6	5.2	15	30	6.5	12100	515	759	79	68	100	8.2
5	5.8	7.6	12	25	6.5	2440	509	564	78	41	71	9.0
6	5.8	6.5	8.5	21	6.0	1190	429	472	74	30	65	10
7	6.8	6.1	12	18	6.0	1850	394	406	75	27	55	11
8	7.2	6.1	26	16	6.0	935	474	366	76	28	45	9.0
9	6.5	6.8	17	14	6.0	769	509	313	85	26	40	7.8
10	6.1	5.8	15	12	6.0	547	394	285	135	26	35	6.0
11	6.5	5.5	13	10	6.0	412	1360	270	125	25	30	4.4
12	6.8	5.2	12	9.0	6.0	374	7750	260	100	18	25	3.7
13	7.2	4.9	11	8.5	6.0	653	1750	247	89	18	21	3.2
14	6.5	4.7	10	8.0	6.5	948	940	232	81	35	20	2.9
15	6.8	4.4	10	8.0	7.0	517	676	228	69	52	17	3.9
16	6.8	4.4	9.5	8.0	7.5	417	536	201	62	33	15	3.7
17	6.1	6.8	9.5	8.5	7.5	398	454	176	62	22	14	3.7
18	6.5	12	9.0	9.0	7.0	429	396	170	58	22	20	3.4
19	6.1	8.5	8.5	9.5	6.5	1440	349	166	61	21	25	2.6
20	5.5	5.2	7.6	10	6.0	1310	326	154	61	18	16	2.4
21	5.5	5.2	7.0	10	25	802	322	143	54	17	15	2.6
22	6.5	4.9	7.5	10	40	873	320	132	45	16	20	4.9
23	8.5	8.0	7.5	9.5	260	873	315	129	42	15	50	5.8
24	6.5	10	7.2	9.0	800	1060	376	123	37	17	70	5.2
25	6.1	11	7.0	8.5	720	873	572	119	33	415	45	4.7
26	8.5	10	7.0	8.0	510	656	1500	116	34	435	30	3.2
27	12	9.5	7.0	8.0	360	596	913	116	33	149	23	2.2
28	7.6	13	6.8	7.5	300	1060	669	102	31	95	18	1.6
29	7.6	12	17	7.5	---	1490	553	95	35	77	14	1.6
30	6.8	9.5	165	7.0	---	999	480	94	38	76	12	1.8
31	5.8	---	121	7.0	---	979	---	92	---	192	10	---
TOTAL	203.8	217.2	599.6	612.5	3143.5	40120	25706	8893	2001	2112	1454	154.2
MEAN	6.57	7.24	19.3	19.8	112	1294	857	287	66.7	68.1	46.9	5.14
MAX	12	13	165	142	800	12100	7750	1520	135	435	209	11
MIN	3.2	4.4	6.8	7.0	6.0	330	315	92	31	15	10	1.6
CFSM	.03	.03	.09	.09	.49	5.70	3.78	1.26	.29	.30	.21	.02
IN.	.03	.04	.10	.10	.52	6.57	4.21	1.46	.33	.35	.24	.03

CAL YR 1978 TOTAL 44400.7 MEAN 122 MAX 1310 MIN 2.5 CFSM .54 IN 7.28
WTR YR 1979 TOTAL 85216.8 MEAN 233 MAX 12100 MIN 1.6 CFSM 1.03 IN 13.96

05580000 KICKAPOO CREEK AT WAYNESVILLE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
20...	1245	80010	--	4.7	--	--	24.0	12.0	--	--	--
24...	1300	17002	17002	6.5	650	8.0	12.0	10.0	10.3	12	82
NOV											
20...	1230	80010	--	5.4	--	--	1.5	5.0	--	--	--
28...	1200	17002	17002	15	645	8.4	-3.0	2.0	13.5	17	220
JAN											
17...	1200	17002	17002	8.5	770	8.5	-4.5	4.0	9.2	11	200
25...	1430	80010	--	5.5	--	--	-9.0	.5	--	--	--
FEB											
21...	1500	17002	17002	25	530	8.6	4.5	1.0	12.6	9	250
27...	1630	80010	--	358	--	--	5.0	1.0	--	--	--
MAR											
04...	1330	80010	--	13900	--	--	1.0	.5	--	--	--
16...	1200	17002	17002	417	560	8.2	6.5	4.5	12.4	11	K120
APR											
06...	1000	17002	17002	423	630	8.3	1.0	5.5	12.0	10	200
06...	1100	17002	17002	433	632	8.3	1.0	5.5	--	10	260
09...	1400	80010	--	487	--	--	4.0	6.5	--	--	--
MAY											
07...	0900	17002	17002	417	620	8.2	20.0	16.5	--	9	360
JUN											
12...	1000	17002	17002	98	630	8.3	24.5	20.0	8.1	14	540
12...	1600	80010	--	96	--	--	26.0	21.0	--	--	--
JUL											
20...	0900	17002	17002	19	550	--	26.0	24.0	7.8	10	350
AUG											
08...	1100	17002	17002	45	590	7.8	34.5	29.0	8.0	7	230
SEP											
11...	1130	80010	--	4.9	--	--	27.0	22.0	--	--	--
18...	1000	17002	17002	3.4	660	8.2	24.5	17.0	8.5	12	K180

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT											
24...	--	10	0	.00	.00	.50	.50	.50	--	--	--
NOV											
28...	21	8	1	.30	.00	.90	.90	1.2	0	170	--
JAN											
17...	28	17	3	1.6	.80	.70	1.5	3.1	0	460	--
FEB											
21...	61	4	0	4.2	1.0	--	--	--	0	140	--
MAR											
16...	19	48	6	8.7	.10	--	--	--	0	950	--
APR											
06...	23	75	8	11	.00	--	--	--	10	1200	--
06...	23	69	6	11	.00	--	--	--	0	1100	--
MAY											
07...	--	93	6	11	.00	--	--	--	10	1200	--
JUN											
12...	--	79	10	8.9	.00	--	--	--	10	1300	--
JUL											
20...	--	30	4	1.3	.00	--	--	--	0	490	--
AUG											
08...	--	22	2	3.8	.00	--	--	--	0	300	0
SEP											
18...	--	45	6	.20	.00	--	--	--	0	1000	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05580500 KICKAPOO CREEK NEAR LINCOLN, IL

LOCATION.--Lat 40°11'30", long 89°21'40", in NW¼ sec.18, T.20 N., R.2 W., Logan County, Hydrologic Unit 07130009, at bridge on county road, 2.4 mi (3.9 km) upstream from small unnamed tributary, 3.0 mi (4.8 km) north of Lincoln, and at mile 7.4 (11.9 km).

DRAINAGE AREA.--306 mi^2 (793 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
16...	1500	17002	17002	12	640	8.3	14.5	10.0	--	13
20...	1100	80010	--	12	--	--	13.0	10.5	--	--
NOV										
20...	1600	17002	17002	15	645	8.6	2.0	5.0	--	8
21...	0830	80010	--	12	--	--	-1.0	3.5	--	--
DEC										
18...	1600	17002	17002	11	690	8.5	4.0	3.5	13.9	8
JAN										
22...	1445	80010	--	12	--	--	-5.5	.5	--	--
22...	1500	17002	17002	12	720	8.5	-5.5	1.0	16.2	6
FEB										
21...	1200	17002	17002	35	600	--	4.0	4.5	11.8	9
MAR										
04...	1700	80010	--	10600	--	--	1.0	.0	--	--
27...	1200	17002	17002	700	610	8.3	4.5	4.0	11.9	13
APR										
25...	1000	17002	17002	710	600	7.9	25.0	15.0	9.4	78
25...	1100	17002	17002	710	620	7.9	21.0	15.0	9.4	64
MAY										
23...	1100	17002	17002	175	720	8.2	18.0	14.0	8.4	8
JUN										
11...	1500	17002	17002	157	580	8.2	28.0	23.5	--	15
13...	1000	80010	--	119	--	--	21.5	20.5	--	--
JUL										
05...	1400	17002	17002	61	620	8.3	25.5	20.5	--	14
AUG										
22...	1100	17002	17002	28	560	8.0	26.0	24.5	7.4	14
SEP										
20...	1100	17002	17002	7.6	--	--	24.5	18.0	7.5	14
20...	1230	80010	--	7.6	--	--	22.0	18.5	--	--

05580500 KICKAPOO CREEK NEAR LINCOLN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)
OCT										
16...	--	.0	255	58	--	20	3	.50	.00	.50
NOV										
20...	--	.0	266	55	15	4	1	.50	.00	.40
DEC										
18...	--	.0	270	63	25	3	0	.80	.10	--
JAN										
22...	--	.0	298	58	33	3	1	1.6	.40	--
FEB										
21...	K20	--	--	--	23	3	0	1.5	.30	--
MAR										
27...	230	.0	190	53	23	112	9	10	.10	--
APR										
25...	4900	.0	144	47	21	800	60	8.5	.10	--
25...	6300	.0	125	47	20	944	48	8.7	.10	--
MAY										
23...	K80	.0	231	56	--	37	1	8.7	.00	--
JUN										
11...	--	.0	196	50	--	71	6	7.7	.10	--
JUL										
05...	--	.0	234	55	--	69	8	3.0	.00	--
AUG										
22...	K1900	.0	213	65	--	69	6	.50	.00	--
SEP										
20...	420	.0	255	63	--	58	11	.40	.00	--

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT									
16...	.50	1.0	--	10	470	0	130	.0	10
NOV									
20...	.40	.90	--	0	230	0	100	.0	0
DEC									
18...	--	--	--	0	310	0	120	.0	--
JAN									
22...	--	--	--	10	340	0	200	.0	20
FEB									
21...	--	--	--	0	330	0	190	.0	0
MAR									
27...	--	--	.14	0	1500	0	120	.0	0
APR									
25...	--	--	--	20	12000	0	690	.0	60
25...	--	--	--	20	11000	0	610	.0	60
MAY									
23...	--	--	--	0	390	0	50	.0	0
JUN									
11...	--	--	--	10	1300	0	120	.1	0
JUL									
05...	--	--	--	20	1100	0	150	.1	20
AUG									
22...	--	--	--	0	1100	0	200	.0	20
SEP									
20...	--	--	--	10	900	0	510	.0	0

K Results based on colony count outside the acceptable range (non-ideal colony count).

05580950 SUGAR CREEK NEAR BLOOMINGTON, IL

LOCATION.--Lat 40°28'18", long 89°01'46", in NE¼NW¼ sec.7, T.23 N., R.2 E., McLean County, Hydrologic Unit 07130009, on left bank 250 ft (76 m) upstream from Interstate 74 highway bridge, 0.4 mi (0.6 km) west of Bloomington, and at mile 48.8 (78.5 km).

DRAINAGE AREA.--34.6 mi^2 (89.6 km^2).

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IL-77: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 725.11 ft (221.013 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--5 years, 51.2 ft^3/s (1.450 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,680 ft^3/s (104 m^3/s) Mar. 3, 1979, gage height, 11.04 ft (3.365 m); minimum daily, 9.0 ft^3/s (0.25 m^3/s) Dec. 25, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,680 ft^3/s (104 m^3/s) Mar. 3, gage height, 11.04 ft (3.365 m); minimum daily, 14 ft^3/s (0.40 m^3/s) Jan. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	20	26	24	101	38	60	23	18	35	21
2	20	20	20	23	24	97	35	92	22	18	40	19
3	43	20	44	22	23	1500	31	122	22	38	18	18
4	21	20	22	20	22	2500	36	65	22	21	18	20
5	22	20	21	20	22	1000	31	52	22	18	18	20
6	19	38	20	19	23	517	27	48	22	20	18	22
7	19	21	20	19	22	148	26	46	27	20	19	18
8	18	20	20	18	22	76	27	44	65	20	20	18
9	19	20	19	18	22	58	25	40	27	20	20	17
10	20	20	19	18	23	34	23	38	32	20	21	17
11	20	19	19	18	23	28	1200	40	23	20	24	17
12	20	19	24	18	22	33	1000	38	22	20	18	17
13	19	21	22	17	22	101	320	37	29	40	17	17
14	19	20	22	18	22	60	185	41	22	30	17	18
15	17	20	24	18	22	33	128	35	20	25	20	18
16	17	20	24	18	22	29	103	32	20	22	18	18
17	18	44	21	17	22	31	84	31	19	20	18	18
18	19	20	21	16	22	42	70	31	26	22	27	18
19	19	19	21	16	22	265	66	29	20	20	19	18
20	18	19	31	15	22	70	62	28	20	18	27	18
21	18	20	21	14	25	44	61	28	20	18	21	18
22	18	19	20	14	66	37	56	27	19	18	40	18
23	24	45	19	18	517	51	55	28	19	18	65	18
24	19	18	18	24	217	76	102	26	18	30	21	18
25	40	18	17	22	115	45	119	26	19	250	20	18
26	24	27	17	23	85	37	156	34	19	30	19	18
27	20	35	18	22	77	34	91	26	18	19	20	18
28	19	21	18	24	67	144	76	24	19	19	20	18
29	18	21	218	25	---	72	72	25	20	19	20	18
30	17	20	166	25	---	60	65	25	20	19	20	18
31	18	---	38	24	---	44	---	23	---	19	20	---
TOTAL	641	683	1024	609	1617	7367	4370	1241	696	909	718	547
MEAN	20.7	22.8	33.0	19.6	57.8	238	146	40.0	23.2	29.3	23.2	18.2
MAX	43	45	218	26	517	2500	1200	122	65	250	65	22
MIN	17	18	17	14	22	28	23	23	18	18	17	17

CAL YR 1978 TOTAL 17366 MEAN 47.6 MAX 591 MIN 16
WTR YR 1979 TOTAL 20422 MEAN 56.0 MAX 2500 MIN 14

05581500 SUGAR CREEK NEAR HARTSBURG, IL

LOCATION.--Lat 40°13'20", long 89°24'12", in SE¼SW¼ sec.35, T.21 N., R.3 W., Logan County, Hydrologic Unit 07130009, at bridge on county road, 0.4 mi (0.6 km) upstream from State Highway 121, 2.6 mi (4.2 km) southeast of Hartsburg, 4.1 mi (6.6 km) northwest of Lincoln, 6.6 mi (10.6 km) downstream from West Fork, and at mile 15.4 (24.8 km).

DRAINAGE AREA.--333 mi^2 (862 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT									
02...	1600	17002	17002	22	750	8.0	22.0	19.0	--
20...	0830	80010	--	25	--	--	8.0	9.5	--
NOV									
08...	1500	17002	17002	32	830	7.8	14.5	10.5	--
20...	1500	80010	--	27	--	--	1.5	6.0	--
DEC									
04...	1600	17002	17002	42	825	8.3	1.0	2.0	--
JAN									
02...	1600	17002	17002	--	635	8.0	-16.5	.5	18.0
22...	1600	80010	--	.80	--	--	-5.5	.5	--
FEB									
05...	1700	17002	17002	34	870	8.5	-15.5	.0	--
20...	1515	80010	--	31	--	--	4.0	1.0	--
MAR									
05...	1400	80010	--	4520	--	--	.0	.0	--
06...	1600	17002	17002	1400	355	8.5	9.0	1.0	12.2
APR									
02...	1600	17002	17002	666	670	8.0	3.5	5.5	11.4
02...	1700	17002	17002	628	690	8.1	3.5	5.5	11.3
19...	1330	80010	--	582	--	--	15.0	13.0	--
30...	1500	17002	17002	632	670	7.9	13.5	11.5	10.6
JUN									
11...	1400	17002	17002	39	600	8.1	28.0	21.5	--
12...	1930	80010	--	163	--	--	25.0	21.0	--
25...	1500	17002	17002	76	720	8.5	28.0	22.0	--
JUL									
23...	1500	17002	17002	--	750	8.5	31.0	28.0	--
SEP									
10...	1400	17002	17002	--	760	8.3	28.5	23.5	--
20...	1000	80010	--	21	--	--	23.5	18.0	--

05581500 SUGAR CREEK NEAR HARTSBURG, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C. SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT								
02...	17	--	70	52	17	5	5.6	.00
NOV								
08...	29	--	70	56	9	5	2.6	3.1
DEC								
04...	20	--	86	61	11	3	3.2	3.3
JAN								
02...	30	--	53	55	31	6	3.9	1.1
FEB								
05...	35	--	73	70	37	7	3.2	5.4
MAR								
06...	38	--	34	17	398	32	4.2	.40
APR								
02...	12	--	57	28	71	6	11	.10
02...	15	--	57	29	98	11	12	.10
30...	13	700	61	27	89	8	11	.10
JUN								
11...	79	--	53	28	I310	140	9.8	.20
25...	4	--	65	36	33	4	7.1	.00
JUL								
23...	20	--	73	50	22	4	2.5	.00
SEP								
10...	18	--	67	56	30	7	3.5	.00

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT								
02...	1.1	1.1	6.7	0	340	6	.0	0
NOV								
08...	--	--	--	0	400	0	--	0
DEC								
04...	.80	4.1	7.3	0	430	0	--	0
JAN								
02...	--	--	--	20	740	0	--	0
FEB								
05...	--	--	--	0	260	0	--	--
MAR								
06...	1.5	1.9	6.1	40	5320	0	.0	0
APR								
02...	--	--	--	0	880	0	--	0
02...	--	--	--	0	640	0	--	0
30...	--	--	--	10	1800	0	--	0
JUN								
11...	--	--	--	20	I3000	0	--	0
25...	--	--	--	0	650	0	--	0
JUL								
23...	--	--	--	10	370	0	--	0
SEP								
10...	--	--	--	0	740	0	--	0

05582000 SALT CREEK NEAR GREENVIEW, IL

LOCATION.--Lat 40°08'01", long 89°44'08", in NE¼NE¼ sec.2, T.19 N., R.6 W., Mason County, Hydrologic Unit 07130009, near center of span on downstream side of bridge on State Highway 29, 3.3 mi (5.3 km) downstream from Pike Creek, 3.5 mi (5.6 km) north of Greenview, and at mile 4.9 (7.9 km).

DRAINAGE AREA.--1,804 mi^2 (4,672 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WSP 1175: 1948(P). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 479.00 ft (145.999 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Nov. 3, 1972, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--38 years, 1,235 ft^3/s (34.98 m^3/s), 9.30 in/yr (236 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,200 ft^3/s (1,170 m^3/s) May 19, 1943, gage height, 20.50 ft (6.248 m), from graph based on gage readings; minimum, 46 ft^3/s (1.30 m^3/s) Sept. 25, 26, Oct. 12-14, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft^3/s (140 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 5	1515	24600	697	18.03	5.496	Apr. 27	0400	7380	209	10.48	3.194
Mar. 20	1100	8480	240	11.49	3.502	May 3	2400	6310	179	9.46	2.883
Apr. 13	1600	*30500	864	*18.90	5.761						

Minimum daily discharge, 129 ft^3/s (3.65 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	146	210	537	200	3040	6120	4410	917	397	1380	598
2	155	146	190	400	210	4000	5740	4000	869	374	2000	491
3	168	146	190	360	200	6930	5270	5300	845	353	2250	349
4	183	146	200	330	190	14600	4870	5970	833	363	2050	299
5	173	143	209	310	200	23400	4670	4820	804	441	1870	268
6	164	143	205	300	220	20300	4290	4210	780	390	1680	268
7	161	146	197	290	200	17600	3830	3800	769	375	1410	268
8	155	166	190	280	195	15500	3650	3400	780	352	1210	246
9	153	153	180	280	190	12600	4010	3030	893	333	1050	230
10	154	146	180	290	185	9720	3570	2750	1230	326	929	217
11	164	146	170	300	200	7130	5090	2540	1230	315	815	209
12	165	140	178	320	220	5870	15300	2340	1040	303	740	205
13	160	140	181	320	220	5760	27600	2170	959	312	661	197
14	156	144	181	280	230	7170	22900	2050	917	355	574	189
15	156	162	185	220	250	5850	17000	1950	857	464	501	181
16	153	147	189	240	220	4580	13900	1840	786	449	460	178
17	150	170	185	260	210	4140	10600	1720	734	392	421	181
18	150	181	189	240	200	4010	7970	1620	700	359	391	189
19	150	199	189	230	200	6540	6160	1570	672	337	368	173
20	146	178	185	250	200	8290	5070	1490	672	313	354	158
21	146	166	178	230	210	7450	4290	1390	639	289	344	158
22	146	158	193	210	250	6020	3720	1330	605	270	372	151
23	137	158	181	220	800	5530	3260	1300	573	252	382	144
24	143	174	181	230	3200	5730	3260	1230	543	251	430	140
25	146	178	158	210	4000	6600	4200	1160	509	537	377	136
26	170	170	162	200	3830	6160	5990	1120	483	1700	369	147
27	187	170	140	220	3190	5460	7150	1140	459	1300	365	144
28	166	190	158	210	2890	5340	6140	1130	438	966	356	133
29	157	200	221	200	---	6980	5220	1030	421	978	343	129
30	153	210	893	190	---	7030	4850	977	411	959	326	129
31	150	---	917	190	---	6470	---	881	---	1350	310	---
TOTAL	4879	4852	7165	8347	22510	255800	225690	73668	22368	16155	25088	6505
MEAN	157	162	231	269	804	8252	7523	2376	746	521	809	217
MAX	187	210	917	537	4000	23400	27600	5970	1230	1700	2250	598
MIN	137	140	140	190	185	3040	3260	881	411	251	310	129
CFSM	.09	.09	.13	.15	.45	4.57	4.17	1.32	.41	.29	.45	.12
IN.	.10	.10	.15	.17	.46	5.27	4.65	1.52	.46	.33	.52	.13

CAL YR 1978 TOTAL 371273 MEAN 1017 MAX 7520 MIN 137 CFSM .56 IN 7.66
WTR YR 1979 TOTAL 673027 MEAN 1844 MAX 27600 MIN 129 CFSM 1.02 IN 13.88

05582000 SALT CREEK NEAR GREENVIEW, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site EI 02.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	COLIFORM, FECAL, 0.45 UM-MF (COLS./100 ML) (31616)
OCT											
02...	1300	17002	17002	173	750	8.1	22.0	18.0	--	11	--
17...	1400	80010	--	148	--	--	14.0	12.0	--	--	--
NOV											
08...	1200	17002	17002	177	720	8.0	11.0	10.0	--	16	--
27...	1545	80010	--	196	--	--	3.0	5.0	--	--	--
DEC											
04...	1300	17002	17002	242	700	8.0	2.0	3.0	--	10	--
JAN											
02...	1300	17002	17002	516	670	7.9	-14.5	.5	11.5	25	--
12...	1000	80010	--	--	--	--	-5.5	.5	--	--	--
FEB											
05...	1500	17002	17002	569	740	8.5	-12.0	.0	11.0	13	--
28...	1415	80010	--	2920	--	--	3.0	1.0	--	--	--
MAR											
06...	1015	80010	--	25300	--	--	4.5	.5	--	--	--
06...	1400	17002	17002	19000	155	8.4	11.0	1.0	11.6	65	400
APR											
02...	1300	17002	17002	5750	540	8.3	4.5	5.5	11.0	13	--
02...	1500	17002	17002	5710	530	8.0	4.5	5.5	10.9	16	--
10...	1400	80010	--	3670	--	--	9.0	7.5	--	--	--
13...	1645	80010	--	31500	--	--	15.5	13.5	--	--	--
30...	1300	17002	17002	5750	550	8.0	14.5	11.5	11.6	16	--
MAY											
31...	1200	80010	--	949	--	--	27.0	21.0	--	--	--
JUN											
11...	1200	17002	17002	1200	570	8.1	28.0	24.5	--	57	--
25...	1200	17002	17002	527	640	8.5	25.5	23.5	--	7	--
JUL											
23...	1200	17002	17002	294	600	8.2	32.0	26.0	--	13	--
SEP											
10...	1200	17002	17002	209	670	8.1	21.5	21.0	--	8	--
19...	1800	80010	--	158	--	--	21.5	20.5	--	--	--

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
OCT											
02...	--	37	9	1.5	.10	.50	.60	2.1	--	0	300
NOV											
08...	--	8	2	1.2	.10	--	--	--	--	10	270
DEC											
04...	34	10	3	2.2	.50	.40	.90	3.1	--	0	330
JAN											
02...	48	37	7	1.9	.60	--	--	--	.36	10	930
FEB											
05...	37	20	2	1.8	1.4	--	--	--	--	0	440
MAR											
06...	8.0	466	50	1.8	.30	--	--	--	--	40	10100
APR											
02...	20	131	13	7.5	.10	--	--	--	--	10	580
02...	20	13	11	7.2	.10	--	--	--	--	10	980
30...	19	153	18	8.3	.00	--	--	--	--	10	2600
JUN											
11...	--	652	60	7.1	.10	--	--	--	--	20	9300
25...	--	67	7	4.6	.00	--	--	--	--	10	1100
JUL											
23...	--	39	4	1.8	.00	--	--	--	--	10	820
SEP											
10...	--	21	3	1.4	.00	--	--	--	--	0	530

05583000 SANGAMON RIVER NEAR OAKFORD, IL
(National stream-quality accounting network station)

LOCATION.--Lat 40°07'25", long 89°59'05", in NW¼SE¼ sec.3, T.19 N., R.8 W., Mason County, Hydrologic Unit 07130008, on right bank at downstream side of bridge on State Highway 97, just upstream from Chicago & Illinois Midland Railway bridge, 0.8 mi (1.3 km) downstream from Crane Creek, 1.8 mi (2.9 km) northwest of Oakford, and at mile 25.7 (41.4 km).

DRAINAGE AREA.--5,093 mi^2 (13,191 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1909 to October 1911, December 1911 to March 1912, August 1914 to June 1919, March 1921 to September 1922, October 1928 to December 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 715: 1922(M). WSP 1175: 1912(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 452.88 ft (138.038 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Jan. 1, 1934, nonrecording gage at site 2.4 mi (3.9 km) upstream at datum 458.66 ft (139.800 m) NGVD. Oct. 1, 1939, to May 14, 1940, nonrecording gage at present site at datum at NGVD.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--52 years (water years 1910-11, 1915-18, 1922, 1929-33, 1940-79), 3,261 ft^3/s (92.35 m^3/s), 8.70 in/yr (221 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 123,000 ft^3/s (3,480 m^3/s) May 20, 1943, gage height, 25.63 ft (7.812 m); minimum, 45 ft^3/s (1.27 m^3/s) Jan. 21-31, 1918, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55,900 ft^3/s (1,580 m^3/s) Apr. 15, gage height, 22.56 ft (6.876 m); minimum daily, 350 ft^3/s (9.91 m^3/s) Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	360	500	1230	520	8230	15200	13900	2220	995	3280	1160
2	393	350	479	986	540	9860	14200	13500	2230	948	5100	1180
3	406	353	486	880	520	14700	13100	14200	2000	941	6620	888
4	412	352	512	800	490	22800	12300	15000	1800	941	6950	830
5	431	352	530	740	500	27200	12000	13500	1690	961	7160	785
6	403	359	525	720	560	32200	11600	11700	1690	1000	7320	754
7	386	369	538	700	520	32900	10900	10300	1550	948	7280	705
8	378	384	494	700	500	34500	10100	9750	1660	948	7080	693
9	372	387	370	700	480	33800	10100	9070	1840	1010	6530	640
10	372	367	485	720	470	31200	9560	8190	2010	1260	5090	605
11	385	371	570	770	520	29900	10400	7390	2080	1280	3310	582
12	385	366	786	780	560	26500	23400	6680	1950	1210	2330	554
13	387	374	781	780	560	23600	34300	6160	1800	1000	2200	532
14	379	367	654	680	600	22800	48100	5380	1720	941	1950	522
15	380	376	644	540	620	20600	54200	4720	1720	968	1650	516
16	368	385	584	600	560	16800	53000	4520	1700	1210	1380	489
17	363	452	580	640	520	14200	44900	4150	1640	1240	1240	482
18	360	491	612	580	500	12700	36200	3770	1620	1120	1180	471
19	358	501	669	600	500	14900	30100	3240	1470	1060	1120	460
20	358	490	633	620	500	16500	25700	3250	1440	1240	1020	457
21	363	482	577	580	500	15800	22000	3250	1550	1290	1110	444
22	359	468	550	520	600	14400	17900	3010	1420	1150	1460	440
23	355	470	533	560	1400	13700	13800	2930	1210	928	1390	436
24	360	468	519	560	5600	13500	11300	2810	1140	908	1460	430
25	375	480	506	500	8400	14200	11100	2660	1080	1110	1260	422
26	380	473	484	520	8200	14000	12700	2450	1080	1850	1230	418
27	380	520	472	560	8000	13500	14300	2400	1020	2130	1360	415
28	388	524	440	540	7660	13900	14000	2360	1010	2180	1410	405
29	388	537	462	500	---	15800	13700	2360	1010	3010	1310	396
30	398	508	640	470	---	16500	13900	2230	1010	2970	1210	392
31	378	---	1390	490	---	16100	---	2160	---	3040	1170	---
TOTAL	11796	12736	18005	20566	50900	607290	624060	196990	47360	41827	94160	17503
MEAN	381	425	581	663	1818	19590	20800	6355	1579	1349	3037	583
MAX	431	537	1390	1230	8400	34500	54200	15000	2230	3040	7320	1180
MIN	355	350	370	470	470	8230	9560	2160	1010	908	1020	392
CFSM	.08	.08	.11	.13	.36	3.85	4.08	1.25	.31	.27	.60	.11
IN.	.09	.09	.13	.15	.37	4.44	4.56	1.44	.35	.31	.69	.13

CAL YR 1978 TOTAL 1211645 MEAN 3320 MAX 25300 MIN 350 CFSM .65 IN 8.85
WTR YR 1979 TOTAL 1743193 MEAN 4776 MAX 54200 MIN 350 CFSM .94 IN 12.73

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May to September 1979.
WATER TEMPERATURES: May to September 1979.

REMARKS.--Interruptions in daily record due to missed samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 770 micromhos Sept. 26, 1979; minimum daily, 425 micromhos July 31, Aug. 2-5, 7, 1979.
WATER TEMPERATURES: Maximum daily, 29.0°C June 9, July 11, 15, 16, 23, 24, 30, Sept. 5, 1979; minimum daily, 23.0°C May 31, Aug. 13, 14, Sept. 16, 17, 19, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 770 micromhos Sept. 26; minimum daily, 425 micromhos July 31, Aug. 2-5, 7.
WATER TEMPERATURES: Maximum daily, 29.0°C June 9, July 11, 15, 16, 23, 24, 30, Sept. 5; minimum daily, 23.0°C May 31, Aug. 13, 14, Sept. 16, 17, 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
OCT												
18...	0900	80010	17003	356	790	7.8	13.0	10.0	7.0	10.1	10	--
NOV												
28...	1430	80010	17003	539	--	--	--	3.0	7.0	--	12	--
DEC												
28...	1200	80010	17003	479	775	8.4	1.0	.5	4.0	13.3	7	--
JAN												
11...	1430	80010	17003	770	805	8.0	-17.0	.5	6.0	9.0	9	--
FEB												
21...	0900	80010	17003	625	950	7.5	4.0	.5	4.0	8.5	15	--
MAR												
01...	1030	--	80010	7980	--	--	3.5	1.0	--	--	--	--
28...	1500	80010	17003	14000	515	7.9	5.0	14.0	56	10.1	14	--
APR												
14...	1230	--	80010	51900	--	--	16.0	14.0	--	--	--	--
17...	0915	80010	80010	45100	280	7.8	20.5	13.0	150	10.2	--	81
MAY												
17...	1000	80010	80010	4080	595	8.0	19.0	16.5	20	8.6	--	--
30...	1715	--	80010	2270	--	--	30.5	22.5	--	--	--	--
JUN												
12...	0900	80010	80010	2080	680	--	21.0	22.0	--	7.6	--	59
JUL												
25...	1500	80010	80010	1150	590	8.4	--	27.0	15	8.9	--	26
SEP												
19...	1300	--	80010	462	--	--	24.5	20.5	--	--	--	--
26...	1300	80010	80010	427	690	8.3	25.0	18.5	3.0	14.7	--	21

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS, NONCARBONATE (MG/L CACO3) (00902)	ACIDITY (MG/L AS CACO3) (00435)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	SODIUM, POTASSIUM DISSOLVED (MG/L AS NA) (00933)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
OCT 18...	--	--	310	--	--	70	32	49	25	1.2	--	3.9
NOV 28...	--	--	300	--	--	68	31	48	25	1.2	--	4.4
DEC 28...	--	--	320	--	--	71	33	31	18	.8	--	3.1
JAN 11...	--	--	290	--	--	64	30	30	18	.8	--	3.1
FEB 21...	--	--	310	--	--	69	32	68	32	1.7	--	4.6
MAR 28...	1100	290	250	79	--	59	24	9.8	8	.3	--	1.7
APR 17...	13000	1200	130	48	--	32	13	4.6	7	.2	--	2.0
MAY 17...	900	K1300	290	79	--	68	29	14	9	.4	--	1.6
JUN 12...	1100	1300	--	--	.0	--	--	--	--	--	--	--
JUL 25...	320	220	260	52	--	57	29	21	15	.6	23	2.3
SEP 26...	K32	130	310	60	.0	73	31	37	20	.9	40	2.9

DATE	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2) (00405)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, NONVOLATILE, SUSPENDED (MG/L) (00540)
OCT 18...	260	--	73	56	.3	6.9	450	--	.61	433	22	--
NOV 28...	240	--	79	58	.3	8.1	446	--	.61	649	19	--
DEC 28...	240	--	64	42	.3	8.7	421	--	.57	544	12	--
JAN 11...	230	--	80	46	.3	5.7	382	--	.52	794	14	--
FEB 21...	250	--	83	86	.4	9.5	527	--	.72	889	13	--
MAR 28...	170	--	49	25	.2	8.3	296	265	.40	11200	138	--
APR 17...	85	--	29	12	.2	5.9	194	150	.26	23600	676	644
MAY 17...	210	--	54	27	.2	7.7	384	328	.52	4230	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--	353	318
JUL 25...	210	1.6	53	31	.3	4.5	357	324	.49	1110	80	63
SEP 26...	250	2.4	58	49	.3	4.6	438	408	.60	505	10	10

K Results based on colony count outside the acceptable range (non-ideal colony count).

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3) (71851)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2) (71856)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)
OCT											
18...	1	1.5	6.9	.03	.11	--	--	.15	.07	--	.10
NOV											
28...	14	2.0	9.1	.03	.10	--	--	.00	.07	--	.10
DEC											
28...	7	1.6	7.5	.03	.10	--	--	.23	.46	--	.60
JAN											
11...	8	1.4	6.3	.00	.00	--	--	.54	.62	--	.80
FEB											
21...	11	1.8	8.3	.03	.10	--	--	1.8	1.8	--	2.4
MAR											
28...	124	6.9	30	.03	.10	7.5	--	.00	.07	--	.10
APR											
17...	32	--	--	--	--	4.8	--	.17	--	.21	--
MAY											
17...	--	--	--	--	--	7.1	--	.01	--	.01	--
JUN											
12...	35	--	--	--	--	--	--	--	--	--	--
JUL											
25...	17	--	--	--	--	.88	--	.20	--	.24	--
SEP											
26...	0	--	--	--	--	.52	.51	.13	.01	.16	.01

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, DISSOLVED (MG/L AS N) (00602)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHATE, TOTAL (MG/L AS PO4) (00650)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
OCT											
18...	.54	--	.69	--	--	--	--	--	.68	--	.65
NOV											
28...	.54	--	.54	--	--	--	--	--	.81	--	.75
DEC											
28...	.47	--	.69	--	--	--	--	--	.55	--	.46
JAN											
11...	.54	--	1.0	--	--	--	--	--	.31	--	.25
FEB											
21...	.62	--	2.4	--	--	--	--	--	1.1	--	1.0
MAR											
28...	.85	.65	.85	.08	.73	8.4	--	37	.24	--	.07
APR											
17...	3.3	--	3.5	1.7	1.8	8.3	--	37	.53	1.6	.16
MAY											
17...	.83	--	.84	.00	.90	7.9	--	35	.22	.67	.12
JUL											
25...	1.0	--	1.2	.81	.39	2.1	--	9.2	.36	--	.20
SEP											
26...	.84	.04	.97	.92	.05	1.5	.56	6.6	.39	--	.27

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS) (01001)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA) (01006)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD) (01026)
OCT										
18...	--	--	--	--	--	<100	100	100	<5	--
NOV										
28...	--	--	--	--	--	<100	200	100	<5	--
DEC										
28...	--	--	--	--	--	<100	100	100	<5	--
JAN										
11...	--	--	--	--	--	<100	100	100	<5	--
FEB										
21...	--	--	--	--	--	<100	200	200	<5	--
MAR										
28...	--	--	--	--	--	<100	100	100	<5	--
APR										
17...	3	--	--	--	--	--	--	--	0	--
MAY										
17...	3	--	2	100	0	100	--	--	1	1
JUN										
12...	2	--	2	100	30	70	--	--	0	0
JUL										
25...	3	0	--	--	--	--	--	--	0	--
SEP										
26...	--	--	--	--	--	--	--	--	0	--

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR) (01031)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO) (01036)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU) (01041)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
OCT										
18...	<5	<5	--	<5	--	--	--	<5	--	<5
NOV										
28...	<5	<5	--	<5	--	--	--	10	--	10
DEC										
28...	<5	<5	--	<5	--	--	--	<5	--	<5
JAN										
11...	<5	<5	--	<5	--	--	--	10	--	<5
FEB										
21...	<5	<5	--	<5	--	--	--	10	--	10
MAR										
28...	<5	20	--	20	--	--	--	10	--	10
APR										
17...	--	70	--	--	--	--	--	50	--	--
MAY										
17...	0	30	10	20	6	6	0	9	6	3
JUN										
12...	0	30	0	30	4	4	0	10	9	5
JUL										
25...	--	20	--	--	--	--	--	10	--	--
SEP										
26...	--	<10	--	--	--	--	--	0	--	--

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB) (01050)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT										
18...	600	--	10	<50	--	<50	<5	220	--	190
NOV										
28...	800	--	630	110	--	<50	<5	230	--	210
DEC										
28...	500	--	80	60	--	<50	<5	250	--	200
JAN										
11...	400	--	<10	150	--	<50	<5	130	--	70
FEB										
21...	700	--	100	20	--	<50	10	120	--	120
MAR										
28...	4300	--	130	20	--	<50	<5	150	--	<5
APR										
17...	29000	--	--	0	--	--	--	--	--	--
MAY										
17...	2400	2400	10	2	0	2	--	140	130	6
JUN										
12...	7900	7900	30	0	10	5	--	350	350	4
JUL										
25...	1400	--	--	0	--	--	--	--	--	--
SEP										
26...	560	--	--	0	--	--	--	50	--	--

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG) (71895)	MERCURY DISSOLVED (UG/L AS HG) (71890)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE) (01146)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG) (01076)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT											
18...	--	--	--	<50	--	--	--	--	--	<5	160
NOV											
28...	--	--	--	<50	--	--	--	--	--	<5	140
DEC											
28...	--	--	--	<50	--	--	--	--	--	<5	140
JAN											
11...	--	--	--	<50	--	--	--	--	--	<5	130
FEB											
21...	--	--	--	<50	--	--	--	--	--	<5	190
MAR											
28...	--	--	--	10	--	--	--	--	--	<5	150
APR											
17...	<.5	--	--	--	--	--	--	--	--	--	--
MAY											
17...	<.5	.0	<.5	--	1	1	0	0	0	0	--
JUN											
12...	<.5	.0	<.5	--	1	0	1	0	0	0	--
JUL											
25...	<.5	--	--	--	--	--	--	--	--	--	--

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN) (01091)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT								
18...	20	--	20	--	--	--	--	--
NOV								
28...	30	--	<5	--	--	--	--	--
DEC								
28...	40	--	10	--	--	--	--	--
JAN								
11...	10	--	10	--	--	--	--	--
FEB								
21...	50	--	30	--	--	--	--	--
MAR								
28...	40	--	40	7.5	--	77	2910	17
APR								
17...	--	--	--	32	1	--	--	--
MAY								
17...	30	20	10	--	1	108	1190	87
JUN								
12...	20	10	6	16	0	--	--	--
JUL								
25...	--	--	--	5.9	0	109	338	--
SEP								
26...	20	--	--	--	1	23	27	99

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	660	700	430	640
2								---	677	760	425	620
3								---	665	660	425	605
4								---	665	660	425	600
5								---	661	665	425	590
6								---	720	635	430	680
7								---	719	630	425	695
8								---	720	630	430	695
9								---	720	740	475	655
10								---	639	750	470	615
11								---	611	725	560	630
12								---	640	670	565	620
13								---	650	610	560	600
14								---	650	610	560	620
15								---	640	605	570	665
16								---	645	600	570	640
17								---	640	600	565	675
18								---	650	600	630	620
19								---	640	755	630	605
20								---	670	610	635	---
21								---	670	605	625	---
22								---	720	605	635	---
23								---	735	575	640	---
24								---	650	600	605	---
25								---	650	600	610	---
26								---	600	440	610	770
27								---	625	445	600	755
28								---	610	440	600	760
29								---	675	440	600	760
30								687	670	430	600	755
31								678	---	425	605	---
MEAN								---	663	607	546	661
MAX								---	735	760	640	770
MIN								---	600	425	425	590

WTR YR 1979 MEAN --- MAX 770 MIN 425

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	23.5	27.0	27.0	27.0
2								---	24.0	27.0	27.5	27.5
3								---	24.0	25.0	28.0	27.0
4								---	25.0	24.5	28.0	27.5
5								---	25.0	24.0	28.0	29.0
6								---	26.0	25.0	28.5	27.0
7								---	27.0	26.0	28.5	26.0
8								---	28.0	27.0	28.0	25.0
9								---	29.0	27.5	27.0	24.0
10								---	25.0	28.0	26.0	25.0
11								---	25.0	29.0	25.0	25.0
12								---	27.0	28.0	24.0	25.0
13								---	28.0	26.0	23.0	25.0
14								---	28.0	27.0	23.0	25.0
15								---	29.0	29.0	24.0	24.0
16								---	28.0	29.0	25.0	23.0
17								---	26.0	28.0	26.0	23.0
18								---	27.0	26.0	27.0	24.0
19								---	28.0	28.0	28.0	23.0
20								---	28.0	28.0	28.0	---
21								---	28.0	28.0	27.5	---
22								---	28.0	28.0	27.0	---
23								---	24.0	29.0	27.0	---
24								---	25.0	29.0	28.0	---
25								---	25.5	28.0	28.0	---
26								---	26.0	28.0	28.0	26.0
27								---	26.0	27.5	27.0	25.0
28								---	25.5	27.5	27.0	25.0
29								---	26.0	27.0	27.5	25.0
30								---	26.5	29.0	28.0	24.5
31								23.0	---	27.0	28.0	---
MEAN								---	26.5	27.5	27.0	25.5
MAX								---	29.0	29.0	28.5	29.0
MIN								---	23.5	24.0	23.0	23.0

WTR YR 1979 MEAN --- MAX 29.0 MIN 23.0

05583000 SANGAMON RIVER NEAR OAKFORD, IL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

	MAR 28,79	JUL 25,79
DATE		
TIME	1500	1500
TOTAL CELLS/ML	1600	52000
DIVERSITY: DIVISION	1.1	1.6
.CLASS	1.1	1.6
..ORDER	1.2	2.1
...FAMILY	1.3	3.0
....GENUS	1.4	3.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)				
.CHLOROPHYCEAE				
..CHLOROCOCCALES				
...OOCYSTACEAE				
....GLOEOACTINIUM	--	-	3200	6
...CHLOROCOCCACEAE				
....CHLOROCOCCUM	--	-	*	0
...HYORODICTYACEAE				
....PEDIASTRUM	--	-	3200	6
...MICRACTINIACEAE				
....GOLENKINIA	--	-	790	2
....MICRACTINIUM	--	-	3200	6
...OOCYSTACEAE				
....ANKISTRODESMUS	40	2	2600	5
....OICTYOSPHAERIUM	--	-	400	1
....KIRCHNERIELLA	--	-	790	2
....OOCYSTIS	--	-	400	1
....SELENASTRUM	--	-	1400	3
....TETRAEDRON	--	-	*	0
...SCENEDESMACEAE				
....ACTINASTRUM	--	-	1600	3
....SCENEDESMUS	81	5	6000	11
....TETRASTRUM	160	10	--	-
..VOLVOCALES				
...CHLAMYOOMONADACEAE				
....CHLAMYDOMONAS	--	-	990	2
....CHLOROGONIUM	--	-	*	0
CHRYSOPHYTA				
.BACILLARIOPHYCEAE				
..CENTRALES				
...COSCINODISCACEAE				
....CYCLOTELLA	120	7	11000#	22
....MELOSIRA	--	-	400	1
..PENNALES				
...NAVICULACEAE				
....NAVICULA	40	2	400	1
...NITZSCHIACEAE				
....NITZSCHIA	--	-	600	1
CRYPTOPHYTA (CRYPTOMONADS)				
.CRYPTOPHYCEAE				
..CRYPTOMONADALES				
...CRYPTOMONADACEAE				
....CRYPTOMONAS	--	-	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)				
.CYANOPHYCEAE				
..CHROOCOCCALES				
...CHROOCOCCACEAE				
....ANACYSTIS	--	-	6900	13
..HORMOGONALES				
...OSCILLATORIACEAE				
....OSCILLATORIA	1200#	72	6900	13
EUGLENOPHYTA (EUGLENOIDS)				
.EUGLENOPHYCEAE				
..EUGLENALES				
...EUGLENACEAE				
....EUGLENA	--	-	*	0

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

05583915 SUGAR CREEK NEAR FREDERICK, IL

LOCATION.--Lat 40°05'49", long 90°24'16", in NE¼NW¼ sec.4, T.1 N., R.1 E., Schuyler County, Hydrologic Unit 07130003, at bridge on State Highway 100, 2.3 mi (3.7 km) northeast of Frederick, 8.5 mi (13.7 km) downstream from Harris Branch, and at mile 1.5 (2.4 km).

DRAINAGE AREA.--162 mi^2 (420 km^2).

PERIOD OF RECORD.--April to September 1979. Additional chemical data for water years 1972, 1974-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DH 01.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
APR												
23...	1400	17002	17002	590	8.0	19.5	14.0	12.3	15	--	--	69
23...	1500	17002	17002	585	8.0	19.5	14.0	12.4	15	--	--	70
MAY												
16...	1200	17002	17002	615	8.2	24.5	19.0	--	17	.0	220	81
JUN												
11...	1400	17002	17002	665	8.1	28.5	24.0	--	19	.0	246	99
JUL												
02...	1600	17002	17002	720	8.1	33.0	27.0	--	20	.0	313	64
AUG												
21...	1500	17002	17002	300	7.8	31.0	26.0	--	32	.0	97	36
SEP												
27...	1500	17002	17002	648	8.3	28.5	20.5	--	33	.0	307	37

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
APR												
23...	30	26	4	5.3	.30	.17	0	500	0	--	.0	--
23...	29	25	3	5.3	.20	.16	0	1600	0	--	.0	--
MAY												
16...	--	37	6	1.5	.00	--	0	640	0	390	.0	10
JUN												
11...	--	1020	22	.20	.20	--	0	4400	0	890	.1	0
JUL												
02...	--	66	12	.00	.00	--	0	1900	0	1100	.0	0
AUG												
21...	--	322	24	1.1	.20	--	10	10000	0	670	.0	50
SEP												
27...	--	110	25	.00	.00	--	0	2400	0	1800	.0	0

05584400 DROWNING FORK AT BUSHNELL, IL

LOCATION.--Lat 40°33'45", long 90°31'23", in NE¼SE¼ sec.29, T.7 N., R.1 W., McDonough County, Hydrologic Unit 07130010, on right bank at downstream side of bridge, 200 ft (61 m) above Burlington Northern Railroad bridge, 1 mi (2 km) northwest of Bushnell, and at mile 5.5 (8.8 km).

DRAINAGE AREA.--26.3 mi^2 (68.1 km^2).

PERIOD OF RECORD.--June 1960 to current year.

REVISED RECORDS.--WDR IL-75: 1971(M), Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 615.02 ft (187.458 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--19 years, 19.7 ft^3/s (0.558 m^3/s), 10.17 in/yr (258 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft^3/s (47.6 m^3/s) Nov. 1, 1977, gage height, 10.78 ft (3.286 m), from rating curve extended above 520 ft^3/s (14.7 m^3/s); maximum gage height, 13.26 ft (4.042 m) Sept. 24, 1960; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 240 ft^3/s (6.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 19	2315	299	8.47	9.36	2.853	Apr. 12	unknown	*668	18.9	*[a]10.14	3.091
Mar. 29	1700	319	9.03	9.42	2.871						

[a]from peak stage indicator

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	1.2	12	.00	3.0	70	31	10	5.0	6.2	.23
2	1.6	.01	3.0	3.0	.00	35	41	50	9.0	4.5	3.4	.04
3	.65	.01	2.0	1.3	.00	55	38	110	8.0	6.0	3.3	.04
4	.21	.01	1.5	1.2	.00	90	27	73	7.9	10	2.3	.07
5	.08	.09	1.1	1.1	.00	68	32	45	7.6	7.0	1.8	.04
6	.02	1.2	1.0	1.0	.00	51	40	39	7.3	5.0	1.4	.04
7	.01	.13	3.5	.90	.00	40	33	35	7.1	4.0	1.1	.02
8	.00	.04	2.5	.70	.00	35	26	30	9.0	3.5	.81	.02
9	.00	.02	1.5	.60	.00	30	23	28	10	3.0	.68	.02
10	.98	.02	1.0	.50	.00	27	35	27	9.5	2.8	.85	.02
11	.10	.01	1.5	.50	.00	25	100	31	20	2.5	.65	.01
12	.02	.01	3.0	.45	.00	24	400	26	12	2.3	.45	.01
13	.01	1.4	2.0	.40	.00	27	200	23	15	2.2	.35	.01
14	.00	.16	1.6	.40	.00	35	100	22	12	2.8	.28	.01
15	.00	.07	1.5	.35	.00	36	45	24	10	2.6	.23	.00
16	.00	.36	1.4	.30	.00	32	26	22	8.7	2.3	.20	.00
17	.00	4.7	1.2	.30	.00	28	23	20	7.4	2.2	.17	.00
18	.00	2.7	1.2	.40	.00	100	20	19	7.4	2.0	.12	.00
19	.00	1.2	1.3	.50	.00	212	18	18	12	1.8	1.2	.00
20	.00	.66	1.4	.70	.00	170	25	17	9.0	1.7	.12	.00
21	.00	.58	1.2	.60	1.1	70	50	16	8.0	1.6	.12	.00
22	.11	.70	1.1	.50	2.0	40	35	15	7.0	1.5	1.8	.00
23	1.8	3.5	1.1	.45	3.3	25	25	14	7.0	1.4	.28	.00
24	.07	1.5	1.2	.35	3.9	50	30	13	6.5	1.3	.14	.00
25	.30	1.0	1.1	.25	4.5	35	85	12	6.5	21	.09	.00
26	.10	1.0	1.0	.20	2.7	30	160	15	6.0	10	.07	.00
27	.03	3.5	1.0	.20	2.5	23	95	13	5.5	3.5	.02	.00
28	.01	2.5	1.0	.20	2.5	27	45	11	5.5	2.0	.01	.00
29	.01	2.0	2.0	.10	---	170	35	10	5.0	2.0	.02	.00
30	.01	1.5	1.5	.05	---	241	33	9.0	6.0	6.0	.02	.00
31	.01	---	4.0	.00	---	108	---	8.4	---	8.5	.01	---
TOTAL	6.13	30.59	50.6	29.50	22.50	1942.0	1915	826.4	261.9	132.0	28.19	.58
MEAN	.20	1.02	1.63	.95	.80	62.6	63.8	26.7	8.73	4.26	.91	.019
MAX	1.8	4.7	4.0	12	4.5	241	400	110	20	21	6.2	.23
MIN	.00	.01	1.0	.00	.00	3.0	18	8.4	5.0	1.3	.01	.00
CFSM	.008	.04	.06	.04	.03	2.38	2.43	1.02	.33	.16	.04	.001
IN.	.01	.04	.07	.04	.03	2.75	2.71	1.17	.37	.19	.04	.00

CAL YR 1978 TOTAL 6729.99 MEAN 18.4 MAX 178 MIN .00 CFSM .70 IN 9.52
WTR YR 1979 TOTAL 5245.39 MEAN 14.4 MAX 400 MIN .00 CFSM .55 IN 7.42

05584500 LA MOINE RIVER AT COLMAR, IL

LOCATION.--Lat 40°19'45", long 90°53'55", in SE¼SW¼ sec.18, T.4 N., R.4 W., McDonough County, Hydrologic Unit 07130010, on right bank at downstream side of bridge on State Highway 61, 0.2 mi (0.3 km) downstream from Burlington Northern Railroad bridge, 1 mi (2 km) southwest of Colmar, 1.8 mi (2.9 km) upstream from Troublesome Creek, and at mile 61.8 (99.4 km).

DRAINAGE AREA.--655 mi^2 (1,696 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 491.53 ft (149.818 m) National Geodetic Vertical Datum of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--35 years, 432 ft^3/s (12.23 m^3/s), 8.96 in/yr (228 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft^3/s (765 m^3/s) Sept. 25, 1970, gage height, 25.14 ft (7.663 m); maximum gage height, 27.03 ft (8.239 m) Jan. 3, 1965, ice jam; no flow part of each day Dec. 8, 9, 12, 13, 17, 21, 1955, due to temporary dam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 20	0100	5250	149	20.15	6.142	Apr. 13	1615	*6600	187	*21.16	6.450
Mar. 30	1930	4020	114	18.83	5.739						

Minimum daily discharge, 2.0 ft^3/s (0.057 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	10	47	45	32	500	2080	582	183	69	87	30
2	24	7.5	44	39	31	700	1630	525	145	62	72	58
3	28	6.6	61	35	30	1050	1310	719	118	55	48	31
4	32	8.4	114	32	29	1220	1060	713	110	59	90	18
5	27	8.4	100	30	28	1120	964	563	106	84	80	14
6	28	12	74	29	28	1190	816	495	102	88	40	13
7	19	19	56	28	28	1070	672	455	99	62	28	10
8	14	33	45	27	30	748	628	411	98	48	22	8.7
9	12	26	37	26	32	696	589	369	99	44	19	7.8
10	17	29	30	25	32	1070	518	332	328	42	19	6.8
11	35	24	33	24	32	877	1440	338	538	39	47	6.6
12	20	19	37	24	31	886	5850	489	309	37	48	6.3
13	13	19	39	23	30	1680	6330	422	561	35	24	6.8
14	11	19	42	23	30	2700	4890	349	682	32	16	6.0
15	8.1	24	48	23	29	2300	1770	312	307	38	13	5.2
16	6.3	22	49	23	28	1890	903	276	220	57	11	4.6
17	5.4	73	46	23	27	1800	723	249	176	39	9.9	4.4
18	4.9	204	45	24	27	2030	621	237	156	30	9.4	4.6
19	6.0	139	48	26	27	4280	552	228	147	23	58	4.4
20	6.6	74	53	27	28	4820	537	220	133	20	325	4.5
21	6.3	45	60	27	32	2910	1320	201	118	18	78	3.8
22	8.7	34	69	27	50	1730	931	183	104	16	130	3.4
23	10	34	62	27	300	1760	646	173	95	15	104	3.2
24	14	49	54	26	700	1830	572	170	95	22	132	2.6
25	19	70	46	26	800	1310	581	160	97	305	66	2.8
26	21	60	36	25	720	1170	1650	150	87	891	37	2.6
27	25	56	29	25	600	1000	1780	175	75	539	29	2.6
28	18	56	27	27	560	1030	1450	185	72	191	24	2.4
29	12	58	25	28	---	1980	890	152	71	115	21	2.0
30	16	53	29	30	---	3700	706	135	73	61	18	2.0
31	13	---	40	31	---	2590	---	143	---	47	16	---
TOTAL	503.3	1291.9	1525	855	4351	53637	44409	10111	5504	3183	1721.3	278.1
MEAN	16.2	43.1	49.2	27.6	155	1730	1480	326	183	103	55.5	9.27
MAX	35	204	114	45	800	4820	6330	719	682	891	325	58
MIN	4.9	6.6	25	23	27	500	518	135	71	15	9.4	2.0
CFSM	.03	.07	.08	.04	.24	2.64	2.26	.50	.28	.16	.09	.01
IN.	.03	.07	.09	.05	.25	3.05	2.52	.57	.31	.18	.10	.02

CAL YR 1978 TOTAL 130077.4 MEAN 356 MAX 5000 MIN 4.6 CFSM .54 IN 7.39
WTR YR 1979 TOTAL 127369.6 MEAN 349 MAX 6330 MIN 2.0 CFSM .53 IN 7.23

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
OCT											
03...	1650	80010	28	520	8.3	14.5	16.0	33	9.3	23	--
17...	1445	80010	6.2	530	8.3	10.5	10.5	14	11.4	9	--
NOV											
01...	1430	80010	9.3	650	8.4	21.0	12.5	15	8.0	34	--
14...	1330	80010	10	620	7.2	3.0	9.0	20	8.6	18	--
29...	1430	80010	58	590	7.4	9.0	2.0	20	12.9	--	41
DEC											
12...	1530	80010	37	750	7.3	-1.0	.0	10	9.8	--	21
27...	1530	80010	29	760	7.6	1.5	.0	6.0	13.4	--	23
JAN											
10...	1145	80010	47	770	6.7	-8.0	.0	4.0	14.2	--	13
FEB											
01...	1000	80010	25	640	7.1	--	.0	4.0	7.0	--	96
07...	1300	80010	28	550	8.0	-1.0	.0	3.0	13.2	--	70
27...	1445	80010	600	--	7.6	4.0	.5	25	12.7	--	48
MAR											
13...	1215	80010	1620	400	7.6	17.0	6.5	85	10.7	--	57
20...	1500	80010	4890	290	7.7	11.0	11.0	150	11.0	--	68
APR											
04...	1245	80010	1060	440	7.8	3.5	6.0	45	9.8	--	27
17...	1300	80010	710	442	7.8	22.0	15.0	50	10.0	--	18
MAY											
02...	0930	80010	523	500	8.1	19.0	14.0	40	9.7	--	16
15...	1530	80010	310	550	7.8	25.0	16.5	20	8.8	--	17
30...	1400	80010	130	565	7.7	34.0	21.0	15	8.4	--	8
JUN											
13...	0945	80010	517	295	--	32.0	21.0	150	7.5	--	150
26...	1115	80010	86	575	8.0	30.0	22.0	17	7.9	--	22
JUL											
11...	1315	80010	39	520	8.3	--	28.0	15	--	--	33
31...	1330	80010	46	390	7.9	--	--	35	5.1	--	68
AUG											
07...	1300	80010	28	420	7.6	34.0	29.0	50	6.5	--	23
22...	1510	80010	109	275	7.9	24.5	23.0	250	6.4	--	100
SEP											
19...	1400	80010	4.3	610	7.8	23.0	19.5	25	9.6	--	18

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS, NONCAR-BONATE (MG/L CACO3) (00902)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)
OCT										
03...	1800	1600	--	--	--	--	--	--	--	--
17...	750	390	--	--	.0	.0	--	--	--	--
NOV										
01...	520	400	--	--	--	--	--	--	--	--
14...	--	130	--	--	--	--	46	23	23	3.5
29...	1700	1300	--	--	--	--	--	--	--	--
DEC										
12...	1000	250	--	--	--	--	--	--	--	--
27...	220	140	--	--	--	--	--	--	--	--
JAN										
10...	96	K48	--	--	--	--	--	--	--	--
FEB										
07...	K16	K6	--	--	--	--	70	29	28	4.2
27...	1000	10000	--	--	--	--	--	--	--	--
MAR										
13...	840	8300	--	--	--	--	--	--	--	--
20...	3100	23000	--	--	.0	.0	--	--	--	--
APR										
04...	4400	21000	--	--	--	--	--	--	--	--
17...	590	4800	--	--	--	--	--	--	--	--
MAY										
02...	--	960	--	--	.0	.0	--	--	--	--
15...	2200	--	--	--	--	--	--	--	--	--
30...	180	400	--	--	.0	.0	--	--	--	--
JUN										
13...	14000	K8400	--	--	--	--	--	--	--	--
26...	K480	K640	--	--	.0	.0	--	--	--	--
JUL										
11...	--	K57	--	--	--	--	--	--	--	--
31...	3200	K1900	--	--	--	--	--	--	--	--
AUG										
07...	570	200	--	--	--	--	--	--	--	--
22...	K31000	K28000	0	0	.0	.0	25	15	8.0	7.9
SEP										
19...	K150	K50	--	--	.0	.0	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BICARBONATE (MG/L AS HCO3) (00440)	CARBONATE (MG/L AS CO3) (00445)	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2) (00405)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
OCT									
03...	--	--	--	--	--	--	326	.44	24.6
17...	--	--	--	--	76	--	344	.47	5.82
NOV									
01...	--	--	--	--	--	--	355	.48	8.99
14...	270	0	220	27	62	30	--	--	--
29...	--	--	--	--	--	--	339	.46	53.3
DEC									
12...	--	--	--	--	--	--	353	.48	35.9
27...	--	--	--	--	--	--	418	.57	32.7
JAN									
10...	--	--	--	--	--	--	454	.62	57.9
FEB									
01...	--	--	--	--	--	--	421	.57	28.4
07...	270	0	220	4.3	94	29	--	--	--
27...	--	--	--	--	--	--	230	.31	373
MAR									
13...	--	--	--	--	--	--	195	.27	853
20...	--	--	--	--	24	--	171	.23	2260
APR									
04...	--	--	--	--	--	--	268	.36	767
17...	--	--	--	--	--	--	300	.41	575
MAY									
02...	190	0	160	2.4	53	19	--	--	--
15...	--	--	--	--	--	--	322	.44	270
30...	--	--	--	--	--	--	324	.44	114
JUN									
13...	--	--	--	--	--	--	195	.27	272
26...	--	--	190	--	46	--	370	.50	86.5
JUL									
11...	--	--	--	--	--	--	300	.41	31.6
31...	--	--	--	--	--	--	239	.33	30.1
AUG									
07...	--	--	--	--	--	--	250	.34	19.0
22...	91	0	75	1.8	23	10	--	--	--
SEP									
19...	--	--	230	6.3	42	--	317	.43	3.68

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L) (00540)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)
OCT										
03...	49	--	--	.33	.09	--	.69	.78	1.1	4.9
17...	26	--	7	.22	.09	--	.76	.85	1.1	4.7
NOV										
01...	4	--	--	.01	.08	--	.80	.88	.89	3.9
14...	15	--	--	.05	.03	--	.64	.67	.72	3.2
29...	11	--	--	1.1	.27	--	.63	.90	2.0	8.9
DEC										
12...	8	--	--	1.6	.35	--	.62	.97	2.6	11
27...	4	--	--	1.5	.28	--	.53	.81	2.3	10
JAN										
10...	7	--	--	1.4	.45	--	1.3	1.7	3.1	14
FEB										
01...	29	--	--	1.2	.89	--	.71	1.6	2.8	12
07...	17	--	--	1.4	.79	--	.41	1.2	2.6	12
27...	73	--	--	2.9	1.3	--	1.3	2.6	5.5	24
MAR										
13...	624	--	--	3.1	.41	--	1.7	2.1	5.2	23
20...	315	--	34	.89	.35	--	2.3	2.6	3.5	15
APR										
04...	88	--	--	7.0	.10	--	1.0	1.1	8.1	36
17...	171	--	--	7.3	.08	.10	.22	.30	7.6	34
MAY										
02...	131	110	21	6.7	.04	.05	.56	.60	7.3	32
15...	94	--	--	6.9	.03	.04	.18	.21	7.1	31
30...	43	35	8	5.9	.16	.19	.59	.75	6.7	29
JUN										
13...	2200	--	--	1.1	.38	.46	4.9	5.3	6.4	28
26...	60	41	19	5.1	.05	.06	.61	.66	5.8	26
JUL										
11...	10	--	--	2.6	.09	.11	.77	.86	3.5	15
31...	96	--	--	2.3	.02	.02	1.1	1.1	3.4	15
AUG										
07...	152	--	--	1.6	.07	.08	.90	.97	2.6	11
22...	667	610	57	.77	.20	.24	1.4	1.6	2.4	11
SEP										
19...	1	1	0	.11	.21	.25	.73	.94	1.1	4.6

05584500 LA MOINE RIVER AT COLMAR, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
03...	.18	--	--	--	2200	--	--	--	--	9.6
17...	.15	--	--	5	1500	--	460	<.5	30	5.1
NOV										
01...	.19	--	--	--	2000	--	--	--	--	10
14...	.13	--	--	--	1800	--	--	--	--	8.0
29...	.23	--	--	--	1400	--	--	--	--	6.6
DEC										
12...	.16	--	--	--	1100	--	--	--	--	5.8
27...	.14	--	--	--	--	--	--	--	--	5.2
JAN										
10...	.10	--	--	--	1200	--	--	--	--	4.5
FEB										
01...	.11	--	--	--	620	--	--	--	--	--
07...	.11	--	--	--	590	--	--	--	--	6.1
27...	.43	--	--	--	2600	--	--	--	--	8.3
MAR										
13...	.55	--	--	--	12000	--	--	--	--	6.6
20...	.59	--	--	19	15000	21	350	<.5	70	13
APR										
04...	.27	--	--	--	5200	--	--	--	--	6.7
17...	.20	.61	.61	--	4900	--	--	--	--	7.8
MAY										
02...	.20	.61	.61	40	3300	0	180	<.5	100	15
15...	.18	.55	.55	--	2800	--	--	--	--	--
30...	.14	.43	.43	70	1400	0	180	<.5	20	10
JUN										
13...	1.6	4.9	4.9	--	55000	--	--	--	--	35
26...	.17	.52	.52	30	1300	0	150	<.5	20	4.5
JUL										
11...	.13	--	.40	--	1200	--	--	--	--	5.2
31...	.25	--	.77	--	3300	--	--	--	--	--
AUG										
07...	.28	--	.86	--	2600	--	--	--	--	7.6
22...	.63	--	1.9	30	16000	100	890	<.5	90	30
SEP										
19...	.18	--	.55	10	2100	0	840	1.0	20	6.0

05585000 LA MOINE RIVER AT RIPLEY, IL

LOCATION.--Lat 40°01'31", long 90°37'55", in NE¼ sec.33, T.1 N., R.2 W., Brown County, Hydrologic Unit 07130010, on right bank 600 ft (183 m) downstream from bridge on U.S. Highway 24, 0.2 mi (0.3 km) east of Ripley, 2 mi (3 km) upstream from Town Branch, and at mile 12.3 (19.8 km).

DRAINAGE AREA.--1,293 mi^2 (3,349 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to current year. Prior to October 1931 published as Crooked Creek at Ripley.

REVISED RECORDS.--WSP 975: 1936. WSP 1208: 1925, 1929, 1933. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 431.1 ft (131.40 m) National Geodetic Vertical Datum of 1929. Prior to July 28, 1926, nonrecording gage at site 200 ft (61 m) upstream at datum 0.02 ft (0.006 m) higher. July 28, 1926, to Jan. 11, 1935, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--58 years, 780 ft^3/s (22.09 m^3/s), 8.19 in/yr (208 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,100 ft^3/s (683 m^3/s) Sept. 27, 1970, gage height, 28.42 ft (8.662 m); minimum, 3.9 ft^3/s (0.11 m^3/s) Oct. 21, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 14	0400	5130	145	18.99	5.788	Apr. 2	1445	4930	140	19.40	5.913
Mar. 23	1630	6140	174	20.80	6.340	Apr. 12	1745	*8120	230	*23.06	7.029

Minimum daily discharge, 12 ft^3/s (0.34 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	26	102	86	62	1000	4700	1160	210	73	104	38
2	33	23	89	76	61	1400	4890	1020	237	71	93	36
3	36	26	96	70	59	2000	3870	2660	220	69	129	39
4	47	24	149	66	58	2600	2600	1590	183	66	97	68
5	44	20	158	62	57	2300	2180	1340	166	70	87	49
6	52	23	180	59	58	2500	1650	949	159	90	135	36
7	43	23	140	56	60	2400	1430	826	155	100	93	29
8	42	21	102	53	62	1600	1190	728	155	75	71	26
9	37	23	90	52	64	1400	1120	646	215	65	61	24
10	36	35	82	51	65	2000	1060	604	168	60	58	23
11	53	45	74	49	65	1700	2590	533	386	55	53	22
12	57	39	69	48	64	2520	7460	532	652	53	48	21
13	68	39	65	47	62	3730	7090	644	409	49	43	20
14	52	37	68	47	60	5080	7170	578	687	48	37	19
15	35	32	70	46	58	5000	7370	500	804	47	33	18
16	28	31	74	46	56	5050	6910	424	378	43	30	18
17	24	57	79	46	54	4810	5040	390	260	64	28	17
18	22	71	86	48	53	3640	1520	360	207	58	26	17
19	20	177	93	51	54	5710	1260	350	177	46	25	17
20	18	250	117	54	57	5690	1300	330	162	39	45	16
21	17	152	112	54	60	5510	1270	370	148	35	263	16
22	17	104	121	54	110	5890	2160	340	134	36	179	15
23	19	80	117	54	550	6090	1470	322	121	30	137	15
24	19	68	125	52	1200	5280	1110	291	113	30	161	16
25	19	65	99	51	1500	3810	1950	281	107	62	137	15
26	22	90	77	53	1400	2890	3030	267	101	1170	128	15
27	30	178	61	54	1200	2490	3030	256	100	1260	77	14
28	33	171	56	56	1100	2110	2990	260	91	1050	57	14
29	31	122	54	58	---	2380	2380	277	82	607	47	14
30	36	115	60	60	---	3590	1630	249	77	239	41	12
31	33	---	100	62	---	4460	---	220	---	143	38	---
TOTAL	1059	2167	2965	1721	8309	106620	93420	19297	7064	5903	2561	699
MEAN	34.2	72.2	95.6	55.5	297	3439	3114	622	235	190	82.6	23.3
MAX	68	250	180	86	1500	6090	7460	2660	804	1260	263	68
MIN	17	20	54	46	53	1000	1060	220	77	30	25	12
CFSM	.03	.06	.07	.04	.23	2.66	2.41	.48	.18	.15	.06	.02
IN.	.03	.06	.09	.05	.24	3.07	2.69	.56	.20	.17	.07	.02

CAL YR 1978 TOTAL 336959 MEAN 923 MAX 11000 MIN 17 CFSM .71 IN 9.69
WTR YR 1979 TOTAL 251785 MEAN 690 MAX 7460 MIN 12 CFSM .53 IN 7.24

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to September 1979 (discontinued).
WATER TEMPERATURES: October 1978 to September 1979 (discontinued).

INSTRUMENTATION.--Specific conductance and temperature recorder since October 1978.

REMARKS.--Interruptions in daily conductance and temperature records were due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 814 micromhos Feb. 6, 7, 1979; minimum, 281 micromhos July 27, 1979.
WATER TEMPERATURES: Maximum, 32.0°C Aug. 7, 1979; minimum, 0.0°C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 814 micromhos Feb. 6, 7; minimum, 281 micromhos July 27.
WATER TEMPERATURES: Maximum, 32.0°C Aug. 7; minimum, 0.0°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
OCT											
03...	1430	80010	35	446	8.2	17.0	17.0	28	10.3	17	--
17...	1225	80010	24	450	8.3	14.5	9.5	20	11.0	20	--
NOV											
01...	1300	80010	26	610	8.5	20.0	11.5	20	8.8	29	--
14...	0945	80010	36	570	7.5	3.5	9.5	25	7.6	22	--
29...	1245	80010	122	630	7.2	5.5	2.5	30	12.2	--	38
DEC											
12...	1400	80010	69	580	7.5	-1.0	.0	15	10.5	--	22
27...	1300	80010	61	770	7.5	2.5	.0	7.0	13.2	--	13
JAN											
10...	1700	80010	50	760	6.6	-8.0	.0	6.0	10.6	--	9
FEB											
07...	0915	80010	61	810	8.4	-3.0	.5	3.0	13.2	--	67
27...	1215	80010	1200	440	7.5	2.0	.5	35	13.2	--	44
MAR											
13...	1430	80010	3720	--	8.0	18.0	3.5	200	13.6	--	58
20...	1330	80010	5690	295	8.2	10.0	10.0	150	11.8	--	79
APR											
04...	1330	80010	2600	448	8.2	4.0	6.5	60	11.2	--	35
18...	1130	80010	1520	471	8.4	16.0	12.5	65	9.4	--	22
MAY											
01...	1600	80010	1160	488	7.7	11.0	11.5	55	10.2	--	22
15...	1300	80010	500	495	7.8	26.0	16.0	55	8.7	--	42
30...	1045	80010	248	590	7.5	32.0	20.5	10	7.9	--	15
JUN											
12...	1530	80010	650	490	--	33.5	23.5	150	6.8	--	56
26...	0930	80010	101	541	8.2	25.0	21.0	30	8.6	--	40
JUL											
11...	1600	80010	55	515	8.8	34.0	27.0	15	--	--	39
31...	1000	80010	141	280	7.6	--	27.0	55	6.0	--	79
AUG											
07...	1100	80010	92	490	8.0	32.0	28.0	35	7.2	--	20
22...	1200	80010	197	338	8.0	31.5	25.0	100	6.2	--	50
SEP											
18...	1230	80010	18	500	8.3	24.0	20.5	20	9.8	--	22

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS, NONCAR-BONATE (MG/L CACO3) (00902)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA) (00929)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K) (00937)
OCT										
03...	360	220	--	--	--	--	--	--	--	--
17...	390	160	--	--	.0	.0	--	--	--	--
NOV										
01...	420	270	--	--	--	--	--	--	--	--
14...	--	92	--	--	--	--	45	22	19	3.1
29...	1400	920	--	--	--	--	--	--	--	--
DEC										
12...	1100	300	--	--	--	--	--	--	--	--
27...	120	96	--	--	--	--	--	--	--	--
JAN										
10...	120	K72	--	--	--	--	--	--	--	--
FEB										
07...	K12	K8	--	--	--	--	62	25	27	3.4
27...	K600	5400	--	--	--	--	--	--	--	--
MAR										
13...	1000	7600	--	--	--	--	--	--	--	--
20...	2100	K28000	--	--	.0	.0	--	--	--	--
APR										
04...	K1900	7900	--	--	--	--	--	--	--	--
18...	550	16000	--	--	--	--	--	--	--	--
MAY										
01...	--	5000	--	--	.0	.0	--	--	--	--
15...	3100	--	--	--	--	--	--	--	--	--
30...	210	K64	--	--	.0	.0	--	--	--	--
JUN										
12...	K8400	4000	--	--	--	--	--	--	--	--
26...	K240	K280	--	--	.0	.0	--	--	--	--
JUL										
11...	3700	K120	--	--	--	--	--	--	--	--
31...	2700	K12000	--	--	--	--	--	--	--	--
AUG										
07...	470	250	--	--	--	--	--	--	--	--
22...	530	670	0	0	.0	.0	25	12	8.3	5.2
SEP										
18...	150	K30	--	--	.0	.0	--	--	--	--

K Results based on colony count outside the acceptable range (non-ideal colony count).

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BICARBONATE (MG/L AS HCO3) (00440)	CARBONATE (MG/L AS CO3) (00445)	ALKALINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2) (00405)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)
OCT									
03...	--	--	--	--	--	--	279	.38	26.4
17...	--	--	--	--	53	--	284	.39	18.4
NOV									
01...	--	--	--	--	--	--	328	.45	23.0
14...	270	0	220	14	51	24	--	--	--
29...	--	--	--	--	--	--	342	.47	113
DEC									
12...	--	--	--	--	--	--	368	.50	68.6
27...	--	--	--	--	--	--	478	.65	78.7
JAN									
10...	--	--	--	--	--	--	425	.58	58.4
FEB									
07...	270	0	220	1.7	73	28	--	--	--
27...	--	--	--	--	--	--	196	.27	635
MAR									
13...	--	--	--	--	--	--	221	.30	2220
20...	--	--	--	--	31	--	187	.25	2870
APR									
04...	--	--	--	--	--	--	268	.36	1880
18...	--	--	--	--	--	--	302	.41	1240
MAY									
01...	190	0	160	6.1	59	18	--	--	--
15...	--	--	--	--	--	--	308	.42	416
30...	--	--	--	--	--	--	356	.48	238
JUN									
26...	--	--	200	--	46	--	368	.50	100
JUL									
11...	--	--	--	--	--	--	352	.48	52.3
31...	--	--	--	--	--	--	183	.25	69.7
AUG									
07...	--	--	--	--	--	--	306	.42	76.4
22...	110	0	90	1.8	24	11	--	--	--
SEP									
18...	--	--	220	2.2	35	--	282	.38	13.7

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L) (00540)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)
OCT										
03...	48	--	--	.53	.09	--	.76	.85	1.4	6.1
17...	27	--	9	.29	.11	--	.99	1.1	1.4	6.2
NOV										
01...	47	--	--	.04	.12	--	.98	1.1	1.1	5.0
14...	51	--	--	.35	.09	--	.72	.81	1.2	5.1
29...	20	--	--	1.0	.47	--	.63	1.1	2.1	9.3
DEC										
12...	40	--	--	1.3	.47	--	.63	1.1	2.4	11
27...	5	--	--	1.7	.45	--	.55	1.0	2.7	12
JAN										
10...	8	--	--	1.4	.45	--	.37	.82	2.2	9.8
FEB										
07...	14	--	--	1.3	.81	--	.19	1.0	2.3	10
27...	117	--	--	2.2	1.3	--	1.0	2.3	4.5	20
MAR										
13...	514	--	--	3.1	.42	--	1.9	2.3	5.4	24
20...	457	--	50	8.7	.71	--	1.9	2.6	11	50
APR										
04...	220	--	--	5.6	.15	--	1.4	1.5	7.1	31
18...	186	--	--	5.8	.08	.10	.21	.29	6.1	27
MAY										
01...	213	187	26	6.1	.04	.05	.66	.70	6.8	30
15...	199	--	--	5.0	.05	.06	.76	.81	5.8	26
30...	69	49	20	4.9	.21	.25	.50	.71	5.6	25
JUN										
12...	820	--	--	.63	.11	.13	2.6	2.7	3.3	15
26...	98	75	23	3.5	.09	.11	1.1	1.2	4.7	21
JUL										
11...	59	--	--	1.3	.22	.27	1.4	1.6	2.9	13
31...	173	--	--	1.7	.00	.00	.95	.95	2.7	12
AUG										
07...	95	--	--	1.4	.09	.11	1.0	1.1	2.5	11
22...	202	178	24	1.3	.22	.27	1.2	1.4	2.7	12
SEP										
18...	27	27	0	.00	.20	.24	.77	.97	.97	4.3

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT										
03...	.13	--	--	--	2400	--	--	--	--	10
17...	.10	--	--	7	1500	28	490	<.5	30	5.4
NOV										
01...	.17	--	--	--	2200	--	--	--	--	6.4
14...	.13	--	--	--	1700	--	--	--	--	7.2
29...	.21	--	--	--	1900	--	--	--	--	8.2
DEC										
12...	.16	--	--	--	1500	--	--	--	--	6.3
27...	.18	--	--	--	1100	--	--	--	--	4.7
JAN										
10...	.08	--	--	--	840	--	--	--	--	--
FEB										
07...	.09	--	--	--	500	--	--	--	--	4.8
27...	.39	--	--	--	3700	--	--	--	--	8.6
MAR										
13...	.50	--	--	--	14000	--	--	--	--	10
20...	.33	--	--	14	20000	22	390	<.5	150	13
APR										
04...	.31	--	--	--	7900	--	--	--	--	10
18...	.25	.77	.77	--	7200	--	--	--	--	10
MAY										
01...	.26	.80	.80	20	6300	0	230	.5	150	10
15...	.30	.92	.92	--	5000	--	--	--	--	--
30...	.14	.43	.43	80	1500	0	220	<.5	20	8.6
JUN										
12...	.69	2.1	2.1	--	19000	--	--	--	--	--
26...	.21	.64	.64	40	2300	0	290	<.5	30	9.7
JUL										
11...	.16	--	.49	--	1900	--	--	--	--	4.7
31...	.27	--	.83	--	4700	--	--	--	--	10
AUG										
07...	.20	--	.61	--	1800	--	--	--	--	7.2
22...	.32	--	.98	20	5200	100	270	--	50	13
SEP										
18...	.12	--	.37	10	2000	0	590	<.5	10	5.5

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	453	447	450	538	530	534	638	618	625	568	510	539
2	453	442	449	547	538	544	650	636	645	587	573	580
3	449	442	446	552	547	550	648	634	638	589	579	583
4	458	449	455	555	549	552	648	634	643	640	588	611
5	463	456	461	558	552	555	626	615	620	677	646	668
6	463	454	458	560	543	552	661	619	635	705	680	692
7	481	456	466	543	540	541	679	664	674	715	708	713
8	500	481	490	548	543	546	679	674	675	721	718	720
9	510	500	505	554	548	552	691	671	683	724	721	722
10	514	502	507	559	554	557	692	680	687	737	727	733
11	510	502	505	571	562	566	692	661	680	747	740	742
12	515	492	504	573	570	572	659	631	645	766	749	759
13	498	486	493	570	542	560	640	629	633	766	749	758
14	505	497	502	578	567	574	629	599	618	751	744	745
15	503	481	489	589	583	587	604	591	597	754	747	750
16	483	479	480	596	585	592	611	592	606	760	757	759
17	489	483	486	598	561	580	614	608	612	763	756	762
18	489	485	487	609	589	601	637	615	623	769	766	768
19	491	485	487	639	588	614	649	635	645	772	738	760
20	510	492	499	635	596	614	650	636	643	751	734	741
21	529	510	520	595	555	566	665	648	656	760	753	759
22	540	532	538	574	546	566	671	660	664	766	763	764
23	540	532	537	551	517	532	680	663	674	776	769	771
24	529	523	526	562	544	556	715	681	704	786	782	785
25	523	517	522	547	528	534	730	713	724	788	785	787
26	528	523	526	559	534	548	745	724	734	788	788	788
27	542	528	534	574	556	567	774	743	763	797	790	794
28	562	545	555	623	557	594	763	722	745	803	800	801
29	567	556	563	645	617	631	721	363	621	806	803	806
30	556	536	545	657	628	647	505	415	456	809	802	804
31	536	527	530	---	---	---	504	431	464	805	798	802
MONTH	567	442	500	657	517	569	774	363	646	809	510	734
		FEBRUARY			MARCH			APRIL			MAY	
1	807	804	805	503	483	495	398	379	387	493	482	489
2	810	800	805	502	484	496	404	382	392	503	495	500
3	809	803	806	481	339	412	433	408	420	510	504	507
4	812	809	810	339	297	311	455	438	446	525	513	519
5	812	808	810	311	301	307	477	459	465	532	524	527
6	814	811	813	324	308	314	491	479	485	533	529	531
7	814	807	811	318	310	314	497	494	496	546	534	540
8	808	805	806	338	317	328	511	501	505	565	549	555
9	807	803	805	363	338	350	525	515	520	597	566	581
10	805	798	802	416	365	390	537	527	532	635	601	618
11	797	797	797	490	418	452	539	447	512	678	639	657
12	795	791	794	509	470	498	445	371	389	697	609	687
13	790	790	790	---	---	---	377	363	369	573	551	558
14	788	778	783	---	---	---	364	352	357	552	527	540
15	780	769	774	---	---	---	362	356	359	526	506	514
16	781	778	779	---	---	---	391	365	377	533	507	518
17	786	780	782	---	---	---	442	392	419	550	534	543
18	792	781	787	---	---	---	485	447	468	551	545	546
19	797	790	792	---	---	---	508	484	498	560	552	558
20	795	792	794	---	---	---	520	505	512	569	561	566
21	790	673	725	306	290	297	532	517	525	574	566	570
22	671	573	625	316	309	312	535	508	527	575	571	574
23	568	343	440	372	320	348	506	491	498	578	572	575
24	399	349	379	399	378	389	490	484	488	581	575	578
25	448	401	412	404	398	400	501	486	491	586	579	581
26	448	428	437	431	407	419	504	499	502	590	580	586
27	462	429	446	445	433	440	501	494	498	589	583	586
28	482	463	474	449	435	443	491	481	487	592	584	588
29	---	---	---	456	448	451	480	477	479	591	585	589
30	---	---	---	456	434	444	485	477	480	592	586	590
31	---	---	---	435	397	415	---	---	---	589	575	585
MONTH	814	343	710	---	---	---	539	352	463	697	482	563

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	576	571	574	546	518	535	387	384	385	401	377	390
2	575	568	573	535	505	523	399	387	396	414	400	408
3	571	565	569	532	508	522	413	400	404	429	413	421
4	581	566	573	541	535	538	433	414	422	424	402	408
5	582	558	569	549	536	543	451	432	438	410	398	402
6	590	557	573	542	538	541	468	450	457	431	409	420
7	594	583	588	539	529	536	516	469	485	446	428	437
8	598	579	591	534	530	533	492	479	486	459	444	451
9	600	501	560	537	526	532	488	475	482	476	459	467
10	570	494	534	527	505	521	491	462	470	499	476	487
11	586	575	579	524	499	514	532	491	520	522	499	510
12	570	522	538	516	496	507	544	508	524	528	513	521
13	513	481	494	515	499	511	517	507	510	519	491	508
14	486	478	482	516	502	511	527	495	513	494	483	489
15	502	482	492	513	503	509	496	488	492	489	480	484
16	515	460	498	513	507	510	533	492	513	501	484	492
17	461	434	445	516	508	512	571	531	553	501	495	498
18	489	443	468	513	507	509	554	510	523	564	483	497
19	511	491	503	514	485	498	546	526	538	482	470	475
20	531	509	521	510	492	503	555	543	551	483	469	476
21	542	530	537	519	507	513	546	483	514	490	480	485
22	546	542	544	516	500	509	488	389	427	499	491	494
23	551	545	548	507	480	499	387	366	377	501	498	499
24	549	534	540	475	447	460	364	346	353	504	498	501
25	540	534	537	464	439	453	342	326	336	519	505	512
26	547	531	536	480	287	343	337	316	326	523	517	520
27	549	532	544	367	281	322	338	334	336	533	524	528
28	554	540	547	341	311	322	333	320	326	548	533	539
29	548	541	544	324	287	299	330	321	325	560	548	553
30	553	536	544	350	294	318	346	329	335	561	549	555
31	---	---	---	386	357	376	378	346	362	---	---	---
MONTH	600	434	538	549	281	478	571	316	441	564	377	481
YEAR	814	281	---									

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.0	14.5	16.0	11.0	10.0	10.5	4.5	2.5	3.5	.0	.0	.0
2	18.0	15.0	16.5	11.0	9.5	10.5	4.0	3.0	3.0	.0	.0	.0
3	18.0	16.5	17.0	11.0	10.0	10.5	3.5	2.0	3.0	.0	.0	.0
4	17.5	15.0	16.5	13.5	11.5	12.0	2.0	1.5	1.5	.0	.0	.0
5	17.0	14.5	15.5	13.5	12.0	12.5	2.5	1.0	2.0	.0	.0	.0
6	14.5	13.0	13.5	12.5	10.0	11.5	1.5	.5	1.0	.0	.0	.0
7	13.0	12.0	13.0	10.0	8.5	9.0	.0	.0	.0	.0	.0	.0
8	12.5	10.5	11.5	9.0	7.5	8.5	.0	.0	.0	.0	.0	.0
9	14.0	11.0	12.5	9.5	8.0	9.0	.0	.0	.0	.0	.0	.0
10	14.0	13.0	13.5	10.0	8.5	9.0	.0	.0	.0	.0	.0	.0
11	14.0	13.0	14.0	10.0	9.0	9.5	.5	.0	.5	.0	.0	.0
12	14.0	13.0	13.5	10.0	9.5	9.5	.5	.5	.5	.0	.0	.0
13	13.5	12.5	13.0	12.0	10.0	11.0	.5	.0	.0	.0	.0	.0
14	12.5	11.0	11.5	11.5	8.5	9.5	.5	.0	.0	.0	.0	.0
15	11.5	9.5	10.5	8.5	7.5	8.0	.5	.0	.5	.0	.0	.0
16	11.0	9.5	10.0	7.5	7.5	7.5	.5	.0	.5	.0	.0	.0
17	10.0	8.5	9.5	8.0	7.0	7.5	.5	.0	.0	.0	.0	.0
18	11.0	9.5	10.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
19	10.5	9.5	10.0	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
20	11.5	9.5	10.5	6.0	4.5	5.0	.5	.0	.0	.0	.0	.0
21	13.0	10.5	11.5	4.5	4.0	4.5	.0	.0	.0	.0	.0	.0
22	14.0	12.0	13.0	4.5	4.0	4.0	.0	.0	.0	.0	.0	.0
23	13.0	11.0	12.5	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
24	10.5	9.0	10.0	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
25	12.0	9.5	11.0	5.5	4.0	5.0	.0	.0	.0	.0	.0	.0
26	11.5	10.0	11.0	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
27	10.5	9.0	10.0	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0
28	10.5	9.0	9.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
29	9.5	8.5	9.0	3.5	2.5	3.0	.5	.0	.0	.0	.0	.0
30	10.0	8.5	9.0	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
31	10.0	8.5	9.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	18.0	8.5	12.0	13.5	2.0	7.5	4.5	.0	.5	.0	.0	.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.5	.5	.5	11.0	9.5	10.0	11.5	11.0	11.5
2	.0	.0	.0	.5	.5	.5	9.5	7.0	8.0	13.5	12.0	12.5
3	.0	.0	.0	.5	.5	.5	7.0	6.0	6.5	13.5	13.0	13.5
4	.0	.0	.0	.5	.5	.5	6.5	6.5	6.5	13.0	12.5	13.0
5	.0	.0	.0	.5	.5	.5	8.0	6.5	7.0	14.0	12.5	13.0
6	.0	.0	.0	1.0	.5	.5	7.0	6.5	7.0	15.5	13.5	14.5
7	.0	.0	.0	.5	.5	.5	7.5	6.5	7.0	17.5	15.0	16.0
8	.0	.0	.0	1.0	.5	.5	8.5	7.5	8.0	20.0	17.5	18.5
9	.0	.0	.0	1.0	.5	.5	8.5	8.0	8.0	22.0	20.0	21.0
10	.0	.0	.0	1.0	.0	.5	8.5	7.5	8.0	23.0	21.5	22.0
11	.0	.0	.0	2.0	.0	1.0	8.5	7.0	8.0	23.0	20.0	21.5
12	.0	.0	.0	3.0	1.0	2.0	12.0	8.5	10.0	20.0	19.0	19.5
13	.0	.0	.0	---	2.5	---	12.5	11.0	12.0	19.0	17.5	18.5
14	.0	.0	.0	---	---	---	13.5	11.5	12.5	18.5	17.0	18.0
15	.0	.0	.0	---	---	---	14.0	12.5	13.0	18.5	17.0	18.0
16	.0	.0	.0	---	---	---	13.5	12.5	13.0	18.5	16.5	18.0
17	.0	.0	.0	---	---	---	13.0	12.0	12.5	20.0	18.0	18.5
18	.0	.0	.0	---	---	---	13.0	12.5	13.0	21.0	19.0	20.0
19	.0	.0	.0	---	---	---	13.5	13.0	13.0	22.0	20.0	21.0
20	.0	.0	.0	11.0	---	---	14.0	13.0	13.5	22.5	20.5	21.5
21	.0	.0	.0	11.0	9.5	10.5	14.0	14.0	14.0	22.0	20.0	21.0
22	.0	.0	.0	11.0	9.5	10.5	14.5	13.5	14.0	21.5	19.0	20.0
23	.0	.0	.0	11.5	10.5	11.0	14.5	13.5	14.0	21.0	19.5	20.0
24	.5	.0	.0	10.0	8.0	9.0	14.5	14.0	14.5	20.0	18.0	19.0
25	.5	.0	.0	8.0	5.5	6.5	16.5	14.5	15.5	19.5	17.0	18.0
26	.5	.0	.0	5.5	4.0	4.5	16.0	14.5	15.5	19.0	17.0	17.5
27	.5	.0	.0	5.0	4.0	4.5	15.5	13.0	14.5	19.5	16.5	17.5
28	.5	.0	.5	7.0	4.5	5.5	13.0	12.5	12.5	20.5	17.5	19.0
29	---	---	---	9.0	7.0	8.0	12.0	11.5	12.0	21.5	18.5	20.0
30	---	---	---	11.5	9.0	10.5	12.0	10.5	11.5	23.0	20.5	21.5
31	---	---	---	11.5	11.0	11.5	---	---	---	24.0	22.0	22.5
MONTH	.5	.0	.0	---	---	---	16.5	6.0	11.0	24.0	11.0	18.5

05585000 LA MOINE RIVER AT RIPLEY, IL--Continued

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.0	21.5	22.5	25.5	21.5	23.5	27.0	25.5	26.5	25.5	23.5	24.5
2	23.5	21.5	22.5	27.0	22.0	24.5	28.0	24.0	26.0	26.5	23.0	25.0
3	24.0	21.0	22.5	25.5	24.0	24.5	28.5	24.5	26.5	26.5	23.5	25.5
4	25.0	22.0	23.5	25.0	23.0	24.0	30.0	25.0	27.5	26.0	22.5	24.5
5	26.5	22.5	24.5	23.5	21.5	22.5	31.5	26.5	28.5	25.0	22.5	24.0
6	27.0	23.5	25.0	23.5	20.0	21.5	32.0	28.0	29.5	24.5	22.0	23.5
7	27.0	24.5	25.5	25.0	20.5	22.5	32.0	28.0	30.0	24.0	21.0	22.0
8	26.5	24.5	25.5	25.5	21.0	23.5	31.5	28.0	30.0	21.5	19.0	20.5
9	27.5	25.0	26.0	26.5	22.5	24.5	31.0	28.5	30.0	21.5	19.0	20.0
10	25.5	24.0	25.0	27.5	23.5	25.0	30.0	27.0	28.0	23.0	19.5	21.0
11	24.5	22.0	23.5	28.0	23.5	26.0	27.0	24.5	26.0	23.5	20.5	21.5
12	24.0	22.5	23.0	27.5	24.5	26.5	26.0	22.0	24.0	23.0	21.0	22.0
13	24.5	22.5	23.5	28.5	25.0	27.0	25.5	22.0	23.5	22.0	20.5	21.0
14	24.5	23.5	24.0	28.5	26.0	27.0	24.5	21.5	22.5	20.0	18.0	19.0
15	24.0	22.5	23.0	29.5	25.0	27.0	21.5	20.0	20.5	19.0	16.0	17.5
16	25.5	23.0	24.0	29.0	26.0	27.5	22.5	19.5	21.0	19.5	15.5	17.5
17	26.5	24.5	25.5	28.0	25.0	26.5	25.0	20.0	23.0	19.5	16.0	17.5
18	27.0	24.5	25.5	27.5	23.0	25.0	27.5	23.5	25.5	20.5	17.0	18.0
19	28.0	25.0	26.0	26.5	22.5	24.5	27.0	25.0	26.5	20.0	17.0	18.5
20	29.0	26.0	27.5	26.0	22.5	24.5	27.0	25.5	26.0	19.5	16.5	18.0
21	29.0	26.0	27.5	26.5	22.5	25.0	26.5	24.0	25.5	18.5	17.5	18.0
22	28.5	26.0	27.0	27.0	23.0	25.5	26.5	24.5	25.0	18.5	15.0	16.5
23	26.5	24.5	25.5	27.0	24.0	26.0	25.5	23.5	24.0	17.5	14.5	16.0
24	26.0	22.0	24.0	27.0	25.0	26.5	24.5	22.0	23.0	19.5	14.5	16.5
25	25.0	21.0	23.0	27.0	25.0	26.0	25.0	21.5	23.0	21.0	16.0	18.0
26	25.0	20.5	23.5	25.0	23.0	24.0	24.0	22.0	22.5	21.0	17.0	18.5
27	22.5	21.0	22.0	25.0	23.5	24.5	24.5	22.0	23.0	20.5	17.0	18.5
28	23.0	21.0	22.0	26.0	24.0	25.0	25.5	22.0	23.5	21.5	16.5	18.5
29	24.0	21.0	22.5	26.5	24.5	25.5	25.5	22.5	24.0	22.0	18.0	19.5
30	25.5	21.0	23.0	28.5	25.5	27.0	25.5	22.5	24.0	21.5	18.0	19.5
31	---	---	---	28.0	27.5	27.5	25.5	24.0	25.0	---	---	---
MONTH	29.0	20.5	24.5	29.5	20.0	25.0	32.0	19.5	25.5	26.5	14.5	20.0
YEAR	32.0	.0	---									

05585275 INDIAN CREEK AT ARENZVILLE, IL

LOCATION.--Lat 39°52'40", long 90°22'38", in SW¼SE¼ sec.31, T.17 N., R.11 W., Cass County, Hydrologic Unit 07130011, at bridge on county road at the western edge of Arenzville, 3.0 mi (4.8 km) upstream from Prairie Creek, 3.6 mi (5.8 km) downstream from Little Indian Creek, and at mile 11.1 (17.9 km).

DRAINAGE AREA.--164 mi^2 (425 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (COOE NUMBER) (00028)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-OUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, OIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)
OCT										
26...	1100	17002	17002	2.4	693	8.2	6.5	9.5	--	26
NOV										
13...	1330	80010	--	1.8	--	--	14.0	13.5	--	--
21...	1200	17002	17002	2.5	628	8.0	-.5	3.5	--	36
OEC										
21...	1200	17002	17002	6.3	605	8.2	1.0	.5	13.7	21
JAN										
11...	1050	80010	--	5.6	--	--	-10.0	.0	--	--
30...	1200	17002	17002	7.2	735	8.2	-9.0	.5	12.2	9
FEB										
26...	1400	17002	17002	90	380	7.8	-.5	.0	--	31
MAR										
26...	1500	17002	17002	160	638	8.2	4.5	5.0	14.0	15
APR										
18...	1400	17002	17002	330	640	8.1	19.5	13.0	10.8	17
18...	1500	17002	17002	320	635	8.1	21.0	14.0	--	18
MAY										
01...	1000	80010	--	108	--	--	10.0	9.0	--	--
09...	1400	17002	17002	60	675	8.2	31.5	24.0	--	10
JUN										
21...	1200	17002	17002	11	630	8.3	35.0	27.0	--	11
AUG										
06...	1400	17002	17002	14	712	8.3	36.0	30.5	--	13
SEP										
10...	1500	17002	17002	.75	620	8.5	31.0	26.0	--	22
27...	1000	80010	--	.41	--	--	21.5	17.0	--	--

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT										
26...	--	22	3	.00	.00	0	1340	20	.0	--
NOV										
13...	--	--	--	--	--	--	--	--	--	--
21...	17	57	18	.60	.40	0	1950	0	.0	--
OEC										
21...	18	45	2	1.1	.50	0	1380	0	.0	--
JAN										
11...	--	--	--	--	--	--	--	--	--	--
30...	18	5	1	1.6	.60	0	200	0	.0	--
FEB										
26...	11	245	14	2.7	.80	0	2740	0	.0	--
MAR										
26...	20	185	15	9.3	.10	10	2300	30	.0	--
APR										
18...	21	389	18	11	.00	20	5300	0	.0	--
18...	19	446	21	10	.00	30	5100	0	.0	--
MAY										
01...	--	--	--	--	--	--	--	--	--	--
09...	--	64	11	8.0	.00	10	840	0	.0	--
JUN										
21...	--	38	4	4.6	.00	0	700	0	.0	--
AUG										
06...	--	59	8	6.8	.00	0	1100	0	.0	0
SEP										
10...	--	56	11	.00	.00	0	1200	0	.0	--
27...	--	--	--	--	--	--	--	--	--	--

05585500 ILLINOIS RIVER AT MEREDOSIA, IL

LOCATION.--Lat 39°49'24", long 90°34'05", in SE¼ sec.21, T.16 N., R.13 W., Morgan County, Hydrologic Unit 07130011, on left bank in the crib house of Central Illinois Public Service Company in Meredosia, 0.6 mi (1.0 km) downstream from bridge on State Highway 104, 3.9 mi (6.3 km) upstream from McKee Creek, and at mile 71.3 (114.7 km).

DRAINAGE AREA.--26,028 mi^2 (67,413 km^2).

PERIOD OF RECORD.--October 1938 to current year. October 1933 to September 1938 in reports of Mississippi River Commission.

REVISED RECORDS.--WSP 895: 1939. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 418.00 ft (127.406 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 19, 1962, water-stage recorder at site 0.3 mi (0.5 km) upstream at same datum. Since Nov. 11, 1938, auxiliary water-stage recorder at Norfolk & Western Railway bridge, 0.4 mi (0.6 km) southeast of Valley City, 9.5 mi (15.3 km) downstream and at mile 61.3 (98.6 km).

REMARKS.--Records fair except those for winter periods, which are poor. Since Jan. 17, 1900, flow has included diversion from Lake Michigan through Chicago Sanitary and Ship Canal (station 05537000). Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--41 years, 21,379 ft^3/s (605.5 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 123,000 ft^3/s (3,480 m^3/s) May 26-28, 1943; maximum gage height, 28.61 ft (8.720 m) May 26, 1943; minimum daily discharge, 1,740 ft^3/s (49.3 m^3/s) Oct. 12, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119,000 ft^3/s (3,370 m^3/s) Apr. 19, gage height, 27.28 ft (8.315 m); minimum daily, 4,540 ft^3/s (129 m^3/s) Nov. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11200	7390	7420	7640	7200	27100	99400	80900	30300	11000	15800	25800
2	11200	7030	8360	8210	7200	28000	101000	79500	29100	11900	16400	24600
3	10100	7210	8940	7290	7300	30000	101000	79200	26700	12200	17400	24100
4	9690	7280	9640	6750	7500	33900	101000	78700	24200	12200	18000	23700
5	9720	6710	9900	7970	7400	38600	99600	77000	21900	12500	17700	22900
6	9460	6770	11500	9060	7300	41200	98400	77000	18300	13600	18000	21600
7	9150	6440	9930	9970	7200	46800	95200	76300	16300	14200	17900	18800
8	8930	6520	9900	10400	7200	54600	93300	74400	13700	14100	17900	16700
9	8450	5100	8180	10400	7100	62500	90700	73500	14500	14400	18200	13400
10	7670	4640	6240	10500	7000	69900	88700	74800	15300	14300	18800	12800
11	6180	4540	5040	10700	7000	74200	81900	72900	15500	14900	18600	10100
12	5510	4690	7810	10800	7000	74500	83800	71000	17300	14600	17500	10500
13	5630	4910	7970	10900	7000	78100	82300	68900	18400	13400	16700	9090
14	5540	5280	5910	11000	6900	87600	87500	65900	18600	13600	16100	8710
15	5600	6490	6500	11000	6800	87000	92900	64100	19000	13700	15700	8760
16	5550	8520	7000	10500	6800	89100	86600	61800	19000	13300	15100	8330
17	5420	7900	7200	10000	6600	90000	91900	60100	18900	13200	13800	8190
18	6750	7420	7480	9400	6600	89700	100000	57500	18500	12900	12500	8040
19	6560	7890	9470	8600	6600	90200	109000	55400	18400	12500	11500	7220
20	6580	7800	9710	7600	7400	94100	109000	53000	18400	12500	13900	6910
21	6400	7340	9540	7500	8400	93600	106000	48900	18000	12100	17400	7120
22	5960	8200	8900	7500	9500	91900	104000	47400	18000	11700	21500	7690
23	5430	8630	8620	7600	15000	96500	100000	44000	17700	11000	23900	8930
24	6520	7690	8890	7700	18000	101000	96000	43300	17200	9680	24000	9690
25	6770	7870	7950	7700	24000	101000	92100	40900	16700	10100	24500	8420
26	6690	8340	8170	7600	29000	100000	87800	39000	15200	14000	25100	8760
27	6590	8780	6510	7600	32000	99700	84800	36800	12900	14700	25900	9340
28	7030	8600	6240	7500	30000	98100	83300	35000	12200	14800	26200	9230
29	7720	8450	7150	7400	---	97200	83100	33600	11000	14100	26600	7590
30	7060	8930	9880	7300	---	97000	83600	32900	10700	14100	26200	7380
31	6740	---	9620	7200	---	99000	---	31500	---	14600	25800	---
TOTAL	227800	213360	255570	271290	307000	2362100	2813900	1835200	541900	405880	594600	374400
MEAN	7348	7112	8244	8751	10960	76200	93800	59200	18060	13090	19180	12480
MAX	11200	8930	11500	11000	32000	101000	109000	80900	30300	14900	26600	25800
MIN	5420	4540	5040	6750	6600	27100	81900	31500	10700	9680	11500	6910

CAL YR 1978 TOTAL 8000060 MEAN 21920 MAX 72400 MIN 4540
WTR YR 1979 TOTAL 10203000 MEAN 27950 MAX 109000 MIN 4540

05585830 MCKEE CREEK AT CHAMBERSBURG, IL

LOCATION.--Lat 39°49'04", long 90°39'09", in NW¼SE¼ sec.8, T.3 S., R.2 W., Pike County, Hydrologic Unit 07130011, at bridge on State Highway 104 at east edge of Chambersburg, 3.8 mi (6.1 km) downstream from Leineke Branch, 5.5 mi (8.8 km) upstream from South Fork McKee Creek, and at mile 7.1 (11.4 km).

DRAINAGE AREA.--341 mi^2 (883 km^2).

PERIOD OF RECORD.--April to September 1979. Additional chemical data for water years 1959, 1962-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DE 01.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)
APR											
12...	1200	17002	17002	150	7.4	20.5	11.5	143	48	14	3070
MAY											
17...	1200	17002	17002	700	8.1	26.5	20.5	19	--	--	18
17...	1300	17002	17002	695	8.1	28.5	20.5	16	--	--	54
JUN											
11...	1100	17002	17002	410	7.8	26.0	21.0	38	--	--	636
JUL											
02...	1400	17002	17002	670	8.1	34.5	25.5	28	--	--	198
AUG											
06...	1500	17002	17002	615	8.1	38.0	30.5	24	--	--	63
SEP											
10...	1400	17002	17002	600	8.2	31.5	22.0	24	--	--	93

DATE	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR										
12...	200	.70	.20	2.3	--	--	0	--	--	0
MAY										
17...	12	.00	.10	--	0	1000	0	.0	--	--
17...	6	.00	.10	--	0	730	0	.0	--	--
JUN										
11...	54	2.4	.30	--	20	11000	0	.1	--	--
JUL										
02...	15	.00	.10	--	0	5000	0	.0	--	--
AUG										
06...	14	.00	.00	--	0	1300	0	.0	0	--
SEP										
10...	16	.00	.00	--	10	2700	0	.0	--	--

05586040 MAUVAISE TERRE CREEK NEAR MERRITT, IL

LOCATION.--Lat 39°43'53", long 90°24'26", in NW¼SW¼ sec.23, T.15 N., R.12 W., Scott County, Hydrologic Unit 07130011, at bridge on county road, 0.5 mi (0.8 km) downstream from Willow Branch, 1.3 mi (2.1 km) northeast of Merritt, 3.2 mi (5.1 km) south of State Highway 104 at Chapin, and at mile 19.4 (31.2 km).

DRAINAGE AREA.--146 mi^2 (378 km^2).

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (COOE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (COOE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (OEG C) (00020)	TEMPERATURE (OEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT												
05...	0900	80010	--	--	5.6	--	--	14.0	15.0	--	--	--
16...	1500	17002	17002	6.0	--	1350	7.8	11.0	9.5	--	65	--
24...	1525	80010	--	--	4.7	--	--	13.5	12.5	--	--	--
NOV												
15...	1700	80010	--	--	6.3	--	--	7.0	8.5	--	--	--
21...	1000	17002	17002	2.5	--	1038	7.7	.5	4.0	--	33	114
DEC												
13...	0925	80010	--	--	5.5	--	--	-1.0	.5	--	--	--
21...	1100	17002	17002	5.0	--	1158	7.9	.5	.5	9.6	28	160
JAN												
31...	0955	80010	--	--	6.3	--	--	-14.0	.0	--	--	--
FEB												
26...	1100	17002	17002	940	--	270	7.6	-5.0	.0	11.8	34	15
MAR												
13...	1615	80010	--	--	316	--	--	10.0	5.0	--	--	--
20...	1255	80010	--	--	549	--	--	10.0	10.5	--	--	--
26...	1100	17002	17002	185	--	640	7.9	4.0	4.5	11.8	17	32
APR												
18...	0900	17002	17002	--	--	600	7.9	14.0	13.5	9.2	18	25
18...	1000	17002	17002	--	--	680	7.9	14.0	12.0	9.2	18	25
27...	1305	80010	--	--	205	--	--	13.5	10.0	--	--	--
MAY												
09...	1100	17002	17002	100	--	660	7.9	31.5	23.0	--	18	--
29...	1100	17002	17002	41	--	660	7.8	28.0	20.0	--	18	--
JUN												
14...	1525	80010	--	--	28	--	--	27.0	26.0	--	--	--
21...	1100	17002	17002	15	--	762	8.0	32.0	26.0	--	24	--
JUL												
31...	1725	80010	--	--	68	--	--	28.0	26.0	--	--	--
AUG												
06...	1100	17002	17002	31	--	618	8.0	35.0	28.5	--	23	--
SEP												
10...	1200	17002	17002	2.9	--	1320	8.0	26.5	19.5	--	43	--

DATE	SOLIDS, RESIDUE AT 105 OEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT												
16...	41	16	.30	20	--	--	--	0	1830	0	.0	--
NOV												
21...	27	5	.30	5.9	1.1	7.0	7.3	0	1050	0	.0	--
DEC												
21...	32	4	.60	3.3	--	--	--	20	960	0	.0	--
FEB												
26...	78	8	1.9	.80	--	--	--	0	790	0	.0	--
MAR												
26...	47	7	7.8	.20	--	--	--	0	740	0	.0	--
APR												
18...	104	8	8.8	.40	--	--	--	10	1800	0	.0	--
18...	106	10	9.2	.50	--	--	--	10	1900	0	.0	--
MAY												
09...	112	14	8.0	.20	--	--	--	0	2000	--	.0	--
29...	73	7	6.9	.40	--	--	--	10	1500	0	.0	--
JUN												
21...	97	14	4.0	.60	--	--	--	0	1800	0	.0	--
AUG												
06...	130	21	4.1	.10	--	--	--	0	2200	0	.0	0
SEP												
10...	77	17	2.0	2.4	--	--	--	0	1900	0	.0	--

05586100 ILLINOIS RIVER AT VALLEY CITY, IL
(National stream-quality accounting network station)

LOCATION.--Lat 39°42'10", long 90°38'40", in SW¼NW¼ sec.34, T.15 N., R.14 W., Pike County, Hydrologic Unit 07130111, 9.5 mi (15.3 km) downstream from discharge station at Meredosia, on Wabash Railroad bridge, at Flints Creek, 0.5 mi (0.8 km) east of Valley City, 1.8 mi (2.9 km) downstream from Mauvaise Terre Creek, and at mile 61.3 (98.6 km).

DRAINAGE AREA.--26,564 mi^2 (68,801 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1975 to current year.
WATER TEMPERATURES: June 1975 to current year.

REMARKS.--Records of discharge are given for Illinois River at Meredosia (station 05585500). Daily sample data for specific conductance not available Apr. 19 to May 16. Daily sample data for water temperature not available Apr. 19 to May 16 and June 13 to July 30.

COOPERATION.--Pesticide samples were collected by U.S. Geological Survey and analyzed by the U.S. Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,310 micromhos Jan. 29, 1979; minimum daily, 300 micromhos May 7, 1977.
WATER TEMPERATURES: Maximum daily recorded, 31.0°C Aug. 9, 10, 1979; minimum daily, 0.0°C on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,310 micromhos Jan. 29; minimum daily, 330 micromhos Mar. 7, 8.
WATER TEMPERATURES: Maximum daily recorded, 31.0°C Aug. 9, 10; minimum daily, 0.5°C on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
OCT											
25...	1030	80010	80010	6770	780	8.2	--	13.0	36	9.6	--
NOV											
20...	1230	80010	80010	7800	730	8.2	--	7.0	24	10.4	--
DEC											
19...	1000	80010	80010	9470	870	8.1	5.5	3.0	55	13.0	46
JAN											
17...	0930	80010	80010	10000	1080	7.7	.0	.5	20	12.2	14
FEB											
14...	1000	80010	80010	6900	1150	7.7	.5	1.0	21	9.5	71
MAR											
14...	1000	80010	80010	87600	550	7.8	7.0	2.0	400	11.2	33
APR											
18...	0800	80010	80010	100000	365	8.4	16.0	15.0	100	9.8	--
MAY											
16...	1500	80010	80010	61800	720	8.1	22.0	19.0	25	8.8	--
JUN											
12...	1200	80010	80010	17300	680	--	23.0	24.0	--	7.1	43
JUL											
30...	1500	80010	80010	14100	570	7.5	--	--	100	5.3	--
AUG											
29...	1425	80010	80010	26600	460	7.9	25.5	24.0	40	6.7	21
SEP											
26...	1430	80010	80010	8760	775	8.3	32.0	22.0	40	7.2	43

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS, NONCAR-BONATE (MG/L CACO3) (00902)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
25...	K1200	70	300	95	--	--	67	31	39	22	1.0
NOV											
20...	230	670	280	79	--	--	67	27	52	28	1.4
DEC											
19...	440	180	330	130	--	--	75	35	49	24	1.2
JAN											
17...	52	130	400	160	--	--	92	41	85	31	1.9
FEB											
14...	K30	34	340	120	--	--	81	33	61	28	1.4
MAR											
14...	270	2200	180	67	--	--	43	17	27	24	.9
APR											
18...	K480	5500	180	72	--	--	43	18	11	11	.4
MAY											
16...	K91	K140	270	99	--	--	65	26	17	12	.5
JUN											
12...	1900	520	--	--	.0	.0	--	--	--	--	--
JUL											
30...	--	--	210	66	--	--	48	21	31	24	.9
AUG											
29...	2600	406	210	72	--	--	52	20	17	15	.5
SEP											
26...	K60	K32	290	88	--	--	69	28	35	21	.9

DATE	SODIUM, POTAS-SIUM DIS-SOLVED (MG/L AS NA) (00933)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY (MG/L AS CACO3) (00410)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT												
25...	--	4.4	200	--	88	57	.4	4.9	444	412	.60	--
NOV												
20...	--	5.2	200	--	100	68	.4	3.2	474	443	.64	--
DEC												
19...	--	4.7	220	--	100	74	.4	5.6	518	483	.70	--
JAN												
17...	--	5.4	240	--	130	120	.6	7.8	640	626	.87	--
FEB												
14...	--	5.0	220	--	110	87	.4	9.3	587	519	.80	--
MAR												
14...	--	3.1	110	--	51	47	.2	6.1	290	261	.39	--
APR												
18...	--	2.6	110	--	48	24	.2	6.6	261	220	.36	72600
MAY												
16...	--	2.7	170	--	69	33	.3	5.8	391	321	.53	66100
JUL												
30...	35	4.0	140	8.6	59	37	.3	4.3	353	289	.48	--
AUG												
29...	21	3.5	140	3.4	--	--	--	--	--	177	.24	13500
SEP												
26...	39	4.4	200	--	87	54	.5	3.5	482	411	.66	9770

K Results based on colony count outside the acceptable range (non-ideal colony count).

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, NON-VOLA-TILE, SUS-PENDED (MG/L) (00540)	SOLIDS, VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)
OCT											
25...	101	--	7	3.0	--	.13	--	--	--	1.1	--
NOV											
20...	68	--	15	2.8	--	.49	--	--	--	1.1	--
DEC											
19...	231	--	19	2.9	--	2.0	--	--	--	1.5	--
JAN											
17...	85	--	3	3.3	--	2.8	--	--	--	1.2	--
FEB											
14...	46	--	7	2.6	--	.54	--	--	--	2.9	--
MAR											
14...	157	--	15	2.9	--	.94	--	--	--	1.1	--
APR											
18...	60	60	0	4.9	--	.27	--	.33	--	.28	--
MAY											
16...	--	--	--	7.2	--	.02	--	.02	--	.80	--
JUN											
12...	281	257	24	--	--	--	--	--	--	--	--
JUL											
30...	252	221	31	3.4	--	.01	--	.01	--	1.2	--
AUG											
29...	201	201	0	3.6	--	.39	--	.47	--	--	--
SEP											
26...	102	94	8	2.7	2.0	.15	.04	.18	.05	1.1	.78

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NH4 + ORG, SUSP, TOTAL (MG/L AS N) (00624)	NITRO-GEN, AM-MONIA + ORGANIC DIS, (MG/L AS N) (00623)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00602)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHATE, TOTAL (MG/L AS PO4) (00650)	PHOS-PHORUS TOTAL (MG/L AS PO4) (71886)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
OCT										
25...	1.2	.41	.79	4.2	--	19	.36	--	--	.20
NOV										
20...	1.6	.20	1.4	4.4	--	19	.34	--	--	.20
DEC										
19...	3.5	.60	2.9	6.4	--	28	.56	--	--	.27
JAN										
17...	4.0	.50	3.5	7.3	--	32	.49	--	--	.36
FEB										
14...	3.4	.20	3.2	6.0	--	27	.41	--	--	.31
MAR										
14...	2.0	.30	1.7	4.9	--	22	.33	--	--	.12
APR										
18...	.55	.01	.54	5.5	--	24	.31	.95	.95	.11
MAY										
16...	.82	.00	.85	8.0	--	36	.14	.43	.43	.11
JUL										
30...	1.2	--	--	4.6	--	20	.49	--	1.5	.19
AUG										
29...	--	--	--	--	--	--	.41	--	1.3	--
SEP										
26...	1.2	.38	.82	3.9	2.8	17	.32	--	.98	.19

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUS-PENDED TOTAL (UG/L AS AS) (01001)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA) (01006)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD) (01026)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR) (01031)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
NOV												
20...	2	--	2	0	0	0	3	0	4	10	7	3
FEB												
14...	2	--	2	100	0	100	1	0	1	10	10	0
APR												
18...	3	--	--	--	--	--	0	--	--	60	--	--
MAY												
16...	3	--	3	100	0	100	0	0	0	30	10	20
JUN												
12...	4	--	4	0	0	80	0	0	1	40	20	20
JUL												
30...	3	0	--	--	--	--	0	--	--	20	--	--
AUG												
29...	3	--	3	100	0	200	1	0	1	20	10	10
SEP												
26...	6	--	--	--	--	--	0	--	--	50	--	--

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO) (01036)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU) (01041)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB) (01050)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT												
25...	--	--	--	21	--	--	2200	--	--	17	--	--
NOV												
20...	2	2	0	4	1	3	1900	1800	60	11	3	8
DEC												
19...	--	--	--	13	--	--	7300	--	--	20	--	--
JAN												
17...	--	--	--	10	--	--	2600	--	--	35	--	--
FEB												
14...	1	1	0	6	3	3	1800	1800	50	26	18	8
MAR												
14...	--	--	--	14	--	--	5300	--	--	19	--	--
APR												
18...	--	--	--	30	--	--	7200	--	--	0	--	--
MAY												
16...	2	2	0	6	1	5	1400	1400	0	1	1	0
JUN												
12...	3	3	0	10	6	5	5700	5700	10	0	9	4
JUL												
30...	--	--	--	20	--	--	6200	--	--	0	--	--
AUG												
29...	3	3	0	13	6	7	4600	4600	50	13	13	0
SEP												
26...	--	--	--	20	--	--	3700	--	--	0	--	--

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG) (71895)	MERCURY DISSOLVED (UG/L AS HG) (71890)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE) (01146)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, SUSRENDED RECOVERABLE (UG/L AS AG) (01076)	SILVER, DISSOLVED (UG/L AS AG) (01075)
OCT 25...	--	--	--	<.5	--	--	--	--	--	--	--	--
NOV 20...	110	100	10	<.5	.0	<.5	0	0	0	2	2	0
DEC 19...	--	--	--	<.5	--	--	--	--	--	--	--	--
JAN 17...	--	--	--	.6	--	--	--	--	--	--	--	--
FEB 14...	170	30	140	<.5	.0	<.5	0	0	0	0	0	0
MAR 14...	--	--	--	1.4	--	--	--	--	--	--	--	--
ARR 18...	--	--	--	.5	--	--	--	--	--	--	--	--
MAY 16...	60	60	1	<.5	.0	<.5	1	1	0	0	0	0
JUN 12...	270	260	10	<.5	.0	<.5	1	0	1	0	0	0
JUL 30...	--	--	--	<.5	--	--	--	--	--	--	--	--
AUG 29...	100	160	10	<.5	<.0	<.5	0	0	0	0	0	7
SEP 26...	--	--	--	<.5	--	--	--	--	--	--	--	--

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, SUSRENDED RECOVERABLE (UG/L AS ZN) (01091)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
OCT 25...	--	--	--	5.2	--	--	0
NOV 20...	30	30	0	--	5.6	--	0
DEC 19...	--	--	--	8.2	--	--	0
JAN 17...	--	--	--	6.4	--	--	1
FEB 14...	70	30	40	--	12	1.2	0
MAR 14...	--	--	--	4.3	--	--	0
ARR 18...	--	--	--	8.2	--	--	0
MAY 16...	20	20	0	--	--	--	--
JUN 12...	40	40	3	11	--	2.6	0
JUL 30...	--	--	--	7.8	--	--	0
AUG 29...	80	70	10	--	3.3	--	2
SER 26...	--	--	--	7.2	--	--	1

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PCB, TOTAL (UG/L) (39516)	AROCLOR TOTAL 1254 PCB SERIES (UG/L) (39504)	AROCLOR TOT. IN BOT MAT 1242 PCB SERIES (UG/KG) (39499)	AROCLOR TOT. IN BOT MAT 1254 PCB SERIES (UG/KG) (39507)	ALDRIN, TOTAL (UG/L) (39330)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)	CHLORDANE, TOTAL (UG/L) (39350)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	DDD, TOTAL (UG/L) (39360)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL (UG/L) (39365)
NOV 20...	ND	--	11	8	ND	ND	ND	ND	ND	ND	ND
MAR 14...	ND	--	--	--	ND	--	ND	--	ND	--	ND
JUN 12...	ND	--	--	--	ND	--	ND	--	ND	--	ND
JUL 30...	--	.1	--	--	ND	--	ND	--	ND	--	ND

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL (UG/L) (39370)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)	DIAZINON, TOTAL (UG/L) (39570)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	DIELDRIN TOTAL (UG/L) (39380)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDRIN, TOTAL (UG/L) (39390)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL (UG/L) (39398)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)
NOV 20...	ND	ND	ND	ND	ND	ND	.6	ND	ND	ND	ND
MAR 14...	--	ND	--	ND	--	.01	--	ND	--	ND	--
JUN 12...	--	ND	--	ND	--	ND	--	ND	--	ND	--
JUL 30...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL (UG/L) (39340)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)	MALATHION, TOTAL (UG/L) (39530)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39531)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG) (39481)
NOV 20...	ND	ND	ND	.2	ND	ND	ND	ND	ND	ND
MAR 14...	ND	--	.01	--	ND	--	ND	--	ND	--
JUN 12...	ND	--	ND	--	ND	--	ND	--	ND	--
JUL 30...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	METHYL PARATHION, TOTAL (UG/L) (39600)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	METHYL TRITHION, TOTAL (UG/L) (39790)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	PARATHION, TOTAL (UG/L) (39540)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39541)	TOXAPHENE, TOTAL (UG/L) (39400)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39403)	TOTAL TRITHION (UG/L) (39786)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39787)
NOV 20...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAR 14...	ND	--	ND	--	ND	--	ND	--	ND	--
JUN 12...	ND	--	ND	--	ND	--	ND	--	ND	--
JUL 30...	ND	--	ND	--	ND	--	ND	--	ND	--

ND Not detected.

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SEDIMENT, SUSPENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT		
25...	113	99
NOV		
20...	116	99
DEC		
19...	264	99
JAN		
17...	71	99
FEB		
14...	44	100
MAR		
14...	167	91

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	750	740	905	1240	580	491	---	685	710	520	540
2	600	745	745	950	1220	620	481	---	690	710	545	540
3	600	750	755	990	1220	650	479	---	692	720	580	560
4	610	750	760	1000	1200	510	486	---	691	720	555	570
5	630	750	765	980	1220	430	491	---	671	725	565	590
6	630	750	780	1000	1190	420	497	---	680	725	550	605
7	645	750	770	1000	1180	330	509	---	685	725	548	610
8	660	750	775	990	1180	330	534	---	680	730	550	617
9	670	755	785	1010	1180	420	540	---	670	720	545	625
10	670	755	810	1030	1200	440	557	---	690	730	555	630
11	670	750	810	1040	1200	470	560	---	720	725	552	650
12	665	755	810	1040	1160	490	495	---	740	740	450	657
13	660	755	810	1040	1160	515	482	---	750	740	588	660
14	675	755	820	1050	1150	505	500	---	720	710	602	660
15	680	765	835	1060	965	490	492	---	720	690	605	660
16	685	760	840	1070	940	477	447	---	730	670	680	680
17	695	770	850	1070	940	462	431	590	750	650	680	690
18	705	760	840	1200	945	454	439	595	750	640	672	690
19	720	750	805	1160	960	447	---	600	750	630	662	690
20	720	775	905	1180	940	432	---	601	740	630	665	695
21	725	730	920	1200	955	430	---	605	740	630	662	700
22	730	750	930	1220	950	441	---	620	720	720	650	700
23	730	750	965	1240	950	450	---	635	715	650	608	710
24	730	750	1000	1230	550	459	---	645	700	645	532	715
25	790	750	930	1230	440	468	---	661	690	640	508	720
26	710	750	1020	1220	500	489	---	671	700	630	505	720
27	730	740	1030	1240	530	503	---	675	700	600	499	640
28	730	720	1040	1260	525	511	---	689	700	525	517	650
29	730	730	1040	1310	---	518	---	690	700	585	510	638
30	740	740	930	1300	---	510	---	671	710	505	510	643
31	745	---	825	1260	---	502	---	680	---	541	520	---
MEAN	686	750	859	1110	993	476	---	---	709	668	570	649

WTR YR 1979 MEAN --- MAX 1310 MIN 330

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	13.5	4.5	1.0	.5	2.0	9.0	---	22.5	---	29.0	27.0
2	18.5	13.0	5.0	1.0	.5	2.0	9.0	---	23.0	---	28.0	27.0
3	19.0	13.0	4.0	1.0	.5	2.5	9.0	---	23.5	---	28.0	27.0
4	18.5	13.5	3.5	.5	.5	2.5	9.0	---	24.0	---	28.0	27.0
5	18.0	15.0	3.5	.5	.5	2.0	9.0	---	24.0	---	28.0	27.0
6	17.0	14.5	3.0	.5	.5	2.0	8.0	---	25.0	---	29.5	27.0
7	17.0	13.0	2.0	1.0	.5	2.5	8.5	---	25.5	---	29.5	27.0
8	16.0	12.5	1.5	1.5	.5	2.0	9.0	---	26.0	---	30.0	24.0
9	15.0	12.0	1.5	1.0	1.0	2.0	9.0	---	26.0	---	31.0	25.0
10	15.5	12.0	1.5	1.0	1.0	2.0	8.5	---	26.0	---	31.0	24.0
11	15.5	12.0	2.0	1.0	2.0	2.0	9.0	---	25.0	---	29.5	24.0
12	15.5	13.0	2.0	1.0	1.0	2.0	9.5	---	25.0	---	29.5	24.0
13	15.5	12.5	2.0	1.0	1.0	3.0	10.0	---	---	---	27.5	22.0
14	15.0	12.0	2.0	1.0	1.0	3.0	11.0	---	---	---	28.0	22.0
15	14.0	11.5	2.0	1.0	2.0	3.0	11.0	---	---	---	26.5	21.0
16	14.0	11.0	1.0	1.0	1.0	3.5	12.0	---	---	---	24.5	20.0
17	14.0	10.5	1.5	1.0	1.0	4.0	13.0	20.0	---	---	24.0	21.0
18	14.0	9.5	1.5	.5	1.5	4.0	13.0	20.5	---	---	24.0	21.0
19	14.0	11.5	3.0	.5	1.5	5.0	---	21.0	---	---	26.5	21.0
20	14.0	10.0	3.0	.5	1.5	5.5	---	21.5	---	---	26.5	22.0
21	14.0	11.0	3.0	.5	2.0	6.0	---	21.0	---	---	27.0	21.5
22	15.0	8.0	2.5	.5	1.5	6.5	---	21.0	---	---	27.0	20.0
23	14.5	8.5	2.5	.5	2.0	7.0	---	21.0	---	---	26.5	20.0
24	13.5	8.0	1.5	.5	1.5	7.0	---	20.5	---	---	27.0	20.0
25	13.5	7.0	1.5	.5	1.0	7.0	---	20.0	---	---	26.5	20.0
26	14.0	7.0	1.5	.5	1.0	7.0	---	19.5	---	---	26.5	21.0
27	13.0	7.5	1.5	.5	1.5	7.0	---	19.5	---	---	26.0	21.0
28	13.0	6.0	1.5	.5	2.0	7.0	---	19.0	---	---	26.0	21.0
29	13.0	4.5	1.5	.5	---	8.0	---	20.0	---	---	26.0	21.0
30	13.5	4.5	1.5	.5	---	9.0	---	21.0	---	---	27.0	21.0
31	13.5	---	2.0	.5	---	9.0	---	22.0	---	30.0	27.0	---
MEAN	15.0	10.5	2.5	.5	1.0	4.5	---	---	---	---	27.5	23.0
WTR YR 1979	MEAN	---	MAX	31.0	MIN	.5						

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 20,78		MAR 14,79		MAY 16,79		JUL 30,79	
TIME	1230		1000		1500		1500	
TOTAL CELLS/ML	5700		730		3500		14000	
DIVERSITY: DIVISION	1.6		1.7		1.5		1.4	
.CLASS	1.6		1.7		1.5		1.4	
..ORDER	2.1		2.6		2.0		1.6	
...FAMILY	2.9		2.7		2.8		1.6	
....GENUS	3.5		0.0		3.7		1.6	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLORDPHYTA (GREEN ALGAE)								
.CHLDROPHYCEAE								
..CHLDROCDCCALES								
...COELASTRACEAE								
....CDELASTRUM	310	5	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	*	0	--	-	*	0	--	-
....MICRACTINIUM	310	5	--	-	320	9	--	-
...DOCYSTACEAE								
....ANKISTRODESMUS	370	7	100	14	26	1	160	1
....CHDDATELLA	59	1	--	-	--	-	--	-
....DICTYDSPHAERIUM	--	-	120#	16	520	15	--	-
....KIRCHNERIELLA	350	6	14	2	--	-	--	-
....ODCYSTIS	140	2	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	77	2	--	-
....TREUBARIA	*	0	--	-	*	0	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	100	3	--	-
....SCENEDESMUS	240	4	--	-	540#	16	1200	9
....TETRASTRUM	810	14	--	-	150	4	--	-
..ULDTRICHALES								
...ULDTRICHACEAE								
....ULDTHRIX	200	3	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDDMONADACEAE	--	-	72	10	--	-	--	-
....CHLAMYDOMDNAS	--	-	--	-	52	1	--	-
...VDLVOCACEAE								
....PANDORINA	--	-	--	-	210	6	--	-
CHRYSOPHYTA								
.BACILLARIDPHYCEAE								
..CENTRALES								
...CDSCINDDISCACEAE								
....CYCLOTELLA	430	8	58	8	150	4	540	4
....MELOSIRA	220	4	--	-	440	13	--	-
....STEPHANDDISCUS	--	-	--	-	260	7	--	-
..PENNALES								
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	26	1	--	-
....FRAGILARIA	59	1	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	39	1	14	2	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	100	14	90	3	4400#	31
CRYPTDPHYTA (CRYPTDMDNADS)								
.CRYPTDPHYCEAE								
..CRYPTDMDNADALES								
...CRYPTDMDNADACEAE								
....CRYPTDMDNAS	--	-	--	-	120	3	78	1
CYANDPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHRDOCDCCALES								
...CHRDDCDCCACEAE								
....ANACYSTIS	530	9	120#	16	52	1	--	-
..HDRMDGDNALES								
...OSCILLATDRIACEAE								
....OSCILLATDRIA	1500#	26	120#	16	320	9	7800#	55
EUGLENDPHYTA (EUGLENOIDS)								
.EUGLENDPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	39	1	--	-	--	-	--	-
....TRACHELOMONAS	120	2	29	4	--	-	--	-

NOTE: # - DOMINANT DRGANISM; EQUAL TO DR GREATER THAN 15%
* - OBSERVED DRGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

05586100 ILLINOIS RIVER AT VALLEY CITY, IL--Continued

PERIPHYTON

(Sampling method - Polyethylene strip)

DATE	LENGTH OF EXPO-SURE (DAYS) (00022)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70958)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS) (70950)
DEC						
18...	28	.000	.000	.000	.000	--
MAY						
16...	28	1.50	1.89	4.75	1.22	82.1

05586600 APPLE CREEK NEAR ELDRED, IL

LOCATION.--Lat 39°22'11", long 90°32'46", in NE¼ sec.28, T.11 N., R.13 W., Greene County, Hydrologic Unit 07130011, at bridge on county road, 3.9 mi (6.3 km) downstream from Crooked Creek, 5.7 mi (9.2 km) north of Eldred, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--404 mi² (1,046 km²).

PERIOD OF RECORD.--Water years 1978 to current year. Additional chemical data for water years 1959, 1961-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DB 01.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT									
05...	1100	17002	17002	--	7.7	16.0	15.5	--	20
NOV									
13...	1100	17002	17002	620	7.6	21.5	11.5	--	24
DEC									
18...	1100	17002	17002	650	8.0	7.0	1.0	12.0	13
JAN									
17...	1400	17002	17002	715	7.8	1.5	.5	--	13
FEB									
20...	1100	17002	17002	765	7.6	1.0	.0	6.4	14
MAR									
14...	1100	17002	17002	510	7.8	7.0	5.5	12.6	14
APR									
19...	1100	17002	17002	420	7.8	14.0	15.0	8.5	11
19...	1200	17002	17002	421	7.8	16.5	15.0	8.0	11
MAY									
21...	1100	17002	17002	642	7.9	19.0	19.0	4.7	16
JUN									
18...	1100	17002	17002	545	8.0	28.0	25.0	--	26
JUL									
30...	1000	17002	17002	345	7.6	31.5	26.5	--	28
SEP									
12...	1100	17002	17002	512	7.9	29.5	21.5	--	17

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)
OCT								
05...	--	70	1	--	.10	.80	.90	.19
NOV								
13...	--	23	4	--	.00	.70	.70	.18
DEC								
18...	20	5	1	1.9	.30	--	--	--
JAN								
17...	21	8	2	1.5	.50	--	--	--
FEB								
20...	25	4	2	1.7	.90	--	--	--
MAR								
14...	15	87	9	3.7	.30	--	--	--
APR								
19...	13	29	3	3.9	.10	--	--	--
19...	13	44	2	3.8	.10	--	--	--
MAY								
21...	--	75	6	2.9	.10	--	--	--
JUN								
18...	--	277	27	3.5	.20	--	--	.38
JUL								
30...	--	248	20	1.4	.10	--	--	--
SEP								
12...	--	94	10	1.1	.00	--	--	--

05586600 APPLE CREEK NEAR ELDRED, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT								
05...	0	0	0	1100	4	670	.0	100
NOV								
13...	0	0	0	780	0	--	.0	10
DEC								
18...	--	--	0	400	0	--	.0	--
JAN								
17...	--	--	20	400	60	--	.0	--
FEB								
20...	--	--	0	500	0	--	.0	--
MAR								
14...	--	--	10	1600	0	--	.0	--
APR								
19...	--	--	10	1500	0	--	.0	--
19...	--	--	10	1600	0	--	.0	--
MAY								
21...	--	--	0	9500	0	--	.0	--
JUN								
18...	--	--	10	4100	0	--	.0	--
JUL								
30...	--	--	20	6000	0	--	.0	<500
SEP								
12...	--	--	0	1700	0	--	.0	--

05586690 MACOUPIN CREEK NEAR MACOUPIN, IL

LOCATION.--Lat 39°12'04", long 89°58'45", in NW¼NW¼ sec.27, T.9 N., R.8 W., Macoupin County, Hydrologic Unit 07130012, at bridge on Macoupin-Plainview Road, 1.5 mi (2.4 km) downstream from Dry Fork, 1.5 mi (2.4 km) southwest of Macoupin, 10.4 mi (16.7 km) upstream from Coop Branch, and at mile 52.5 (84.5 km).

DRAINAGE AREA.--304 mi^2 (787 km^2).

PERIOD OF RECORD.--April to September 1979. Additional chemical data for water years 1972-77 are published in Water-Resources Investigations 78-23 and 79-24 as site DA 04.

WATER QUALITY DATA, APRIL TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)
APR									
17...	1500	17002	17002	1400	--	560	7.7	20.0	14.0
MAY									
08...	1400	17002	17002	--	--	590	7.9	32.0	23.0
08...	1500	17002	17002	--	--	588	7.9	32.0	23.0
30...	1500	17002	17002	--	--	710	7.9	28.5	21.5
JUN									
18...	1500	80010	80010	--	4.6	735	7.6	30.0	24.5
20...	1100	17002	17002	--	--	730	7.8	29.0	25.0
JUL									
30...	1600	17002	17002	--	--	272	7.5	35.0	28.0
31...	1600	80010	80010	--	27	340	7.4	26.0	25.5
SEP									
17...	1500	17002	17002	--	--	510	8.1	28.5	18.0

DATE	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
APR									
17...	8.6	25	--	--	87	26	136	11	5.4
MAY									
08...	--	19	.0	152	96	--	99	23	3.6
08...	--	20	.0	151	96	--	87	15	3.6
30...	--	29	.0	226	104	--	31	8	.40
JUN									
18...	--	--	.0	270	75	--	--	--	--
20...	--	25	.0	269	71	--	40	8	.20
JUL									
30...	--	33	.0	65	30	--	154	20	1.0
31...	--	--	.0	100	42	--	--	--	--
SEP									
17...	--	31	.0	160	48	--	33	8	.40

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR									
17...	.30	.31	--	--	0	--	--	--	0
MAY									
08...	.10	--	10	1100	0	230	.0	10	--
08...	.10	--	10	900	0	220	.0	10	--
30...	.10	--	0	1000	0	1400	.1	0	--
JUN									
18...	--	--	--	1700	--	1700	--	--	--
20...	.60	--	20	1000	0	1700	.0	20	--
JUL									
30...	.40	--	0	4400	0	540	.0	0	--
31...	--	--	--	3100	--	670	--	--	--
SEP									
17...	.00	--	0	1000	0	1200	.0	10	--

05586800 OTTER CREEK NEAR PALMYRA, IL

LOCATION.--Lat 39°22'42", long 89°56'50", in SE¼ sec.23, T.11 N., R.8 W., Macoupin County, Hydrologic Unit 07130012, on right bank at downstream side of county highway bridge, 3.0 mi (4.8 km) downstream from confluence of East and West Forks, 4.0 mi (6.4 km) southeast of Palmyra, and at mile 21.7 (34.9 km).

DRAINAGE AREA.--61.1 mi^2 (158.2 km^2).

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR IL-74: 1960(P). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 544.30 ft (165.903 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Several observations of water temperature were made during the year and are published under MISCELLANEOUS TEMPERATURE MEASUREMENTS in this report.

AVERAGE DISCHARGE.--20 years, 40.3 ft^3/s (1.141 m^3/s), 8.96 in/yr (228 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,900 ft^3/s (337 m^3/s) Apr. 23, 1966, gage height, 11.91 ft (3.630 m), from rating curve extended above 3,700 ft^3/s (105 m^3/s); no flow for many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a discharge of 15,000 ft^3/s (425 m^3/s), on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 24	0230	1870	53.0	9.96	3.036	Apr. 11	2045	*8210	233	*11.50	3.505
Mar. 4	1230	1170	33.1	9.51	2.899						

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.0	15	1.7	128	45	47	3.1	.00	289	.78
2	.00	.00	.88	14	1.7	143	42	42	2.4	.11	125	.59
3	.00	.00	1.0	8.0	1.7	419	41	52	2.3	.02	33	.28
4	.00	.00	.82	5.1	1.8	1010	47	42	1.8	.07	16	.11
5	.00	.00	.82	3.5	1.8	324	47	33	1.9	.32	7.1	.01
6	.00	.00	1.3	2.5	1.8	137	40	28	1.5	.12	2.8	.00
7	.00	.00	1.3	2.0	1.8	126	35	23	1.3	.01	1.1	.00
8	.00	.00	1.3	2.0	1.8	86	80	20	14	.00	.49	.00
9	.00	.00	1.2	1.5	1.8	80	50	18	21	.00	.22	.00
10	.00	.00	.94	1.5	1.8	87	30	16	10	.00	.10	.00
11	.00	.00	.71	1.5	1.8	64	2340	15	5.5	.00	.08	.00
12	.00	.00	.84	1.5	1.8	67	3000	13	2.9	.00	.04	.00
13	.00	.00	1.5	1.5	1.8	81	527	9.6	2.1	.00	.00	.00
14	.00	.00	1.5	1.5	2.0	81	205	8.3	1.8	.29	.00	.00
15	.00	.00	1.2	1.5	2.0	56	119	7.8	1.3	.00	.00	.00
16	.00	.00	1.1	2.0	2.0	45	82	5.5	.68	.00	.00	.00
17	.00	.05	.85	2.0	2.0	42	61	4.4	.50	.00	.00	.00
18	.00	.40	.86	2.0	2.0	42	47	4.1	.57	.00	.00	.00
19	.00	.06	1.0	2.2	2.0	395	37	4.1	.49	.00	.00	.00
20	.00	.00	1.3	2.3	3.0	188	31	3.9	3.5	.00	11	.00
21	.00	.00	1.1	2.5	68	104	35	4.1	1.3	.00	7.6	.00
22	.00	.00	.91	2.3	334	74	33	3.2	.54	.00	1.2	.00
23	.00	.00	.79	2.0	1160	159	29	3.7	.35	.00	1.2	.00
24	.00	.00	.84	2.0	1380	118	302	4.7	.41	2.4	.03	.00
25	.00	.00	.72	2.0	305	79	226	4.3	.22	3.0	.09	.00
26	.00	1.0	.68	2.0	126	61	570	4.6	.10	1.4	.06	.00
27	.00	1.9	.55	2.0	102	51	281	6.2	.07	18	.04	.00
28	.00	2.3	.37	2.0	114	46	122	6.4	.05	9.8	.00	.00
29	.00	1.9	3.3	1.8	---	44	80	4.5	.06	8.8	4.9	.00
30	.00	1.4	31	1.8	---	45	60	3.9	.00	13	1.4	.00
31	.00	---	12	1.7	---	56	---	6.0	---	36	1.2	---
TOTAL	.00	9.01	73.68	95.2	3627.1	4428	8644	448.3	81.84	93.34	503.65	1.77
MEAN	.000	.30	2.38	3.07	130	143	288	14.5	2.73	3.01	16.2	.059
MAX	.00	2.3	31	15	1380	1010	3000	52	21	36	289	.78
MIN	.00	.00	.37	1.5	1.7	42	29	3.2	.00	.00	.00	.00
CFSM	.000	.005	.04	.05	2.13	2.34	4.71	.24	.05	.05	.27	.001
IN.	.00	.01	.04	.06	2.21	2.70	5.26	.27	.05	.06	.31	.00

CAL YR 1978 TOTAL 21083.44 MEAN 57.8 MAX 3480 MIN .00 CFSM .95 IN 12.84
WTR YR 1979 TOTAL 18005.89 MEAN 49.3 MAX 3000 MIN .00 CFSM .81 IN 10.96

05587000 MACOUPIN CREEK NEAR KANE, IL

LOCATION.--Lat 39°14'03", long 90°23'40", in SE¼SE¼ sec.11, T.9 N., R.12 W., Greene County, Hydrologic Unit 07130012, near center of span on downstream side of bridge on State Highway 267, 1.4 mi (2.3 km) downstream from Link Branch, 3.5 mi (5.6 km) northwest of Kane, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--868 mi^2 (2,248 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1921 to November 1933, May to August 1940, October 1940 to current year.

REVISED RECORDS.--WSP 1175: 1924. WSP 1308: 1922(M), 1928(M), 1931(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 426.77 ft (130.079 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1928, at site 2.0 mi (3.2 km) upstream at various datums. May 17, 1940, to May 17, 1943, water-stage recorder, and May 18, 1943, to July 19, 1970, nonrecording gage at site 800 ft (244 m) downstream at present datum. July 20 to Sept. 18, 1970, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--51 years (water years 1922-33, 1941-79), 532 ft^3/s (15.07 m^3/s), 8.32 in/yr (211 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,000 ft^3/s (1,130 m^3/s) May 18, 1943, gage height, 28.5 ft (8.69 m); no flow Oct. 19-27, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 23	2230	8320	236	20.95	6.386	Apr. 12	2200	*27800	787	*26.51	8.080
Mar. 4	1215	6270	178	19.24	5.864	Apr. 26	1415	7360	208	20.97	6.392

Minimum daily discharge, 6.7 ft^3/s (0.19 m^3/s) Sept. 17, 22, 24, 27, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	8.6	69	593	30	1590	1140	658	59	32	1020	25
2	9.7	8.9	63	525	30	1900	922	581	53	30	1160	23
3	11	9.4	55	455	30	3180	859	909	53	29	826	19
4	10	9.4	52	262	30	5850	934	1310	51	30	325	18
5	9.6	9.9	49	141	30	5640	1000	769	48	30	140	18
6	9.0	10	45	80	30	4660	816	511	45	28	91	13
7	8.5	9.4	47	60	30	2290	716	404	43	26	64	11
8	7.8	9.3	75	50	30	1230	682	327	309	28	49	12
9	7.6	9.9	150	50	30	1070	651	276	633	24	39	12
10	8.0	10	40	50	30	1390	593	236	242	26	35	15
11	13	10	30	40	30	1020	6270	208	112	25	26	11
12	19	10	22	40	30	770	23000	187	82	25	22	9.8
13	20	14	20	40	30	697	17000	174	68	24	20	9.4
14	15	127	39	35	30	724	11500	162	59	23	18	8.6
15	12	142	33	35	30	653	5000	139	52	22	16	7.4
16	12	91	39	35	30	515	1910	119	46	23	17	7.1
17	11	362	35	35	30	438	1450	111	42	34	16	6.7
18	10	228	24	35	30	421	1240	100	40	30	16	7.0
19	9.8	123	24	35	30	1370	1100	93	38	28	15	7.4
20	9.3	86	26	35	30	1980	970	88	36	24	20	7.0
21	9.0	74	26	35	200	1500	926	84	36	17	184	7.0
22	8.7	61	26	38	3380	845	863	78	34	17	846	6.7
23	8.6	54	23	40	7180	2120	764	75	36	16	1710	7.0
24	8.6	48	20	40	7340	2530	1220	69	37	25	271	6.7
25	8.7	43	21	40	6030	1610	2440	65	33	72	75	7.1
26	9.7	303	19	35	4720	990	6500	76	30	148	39	7.0
27	9.4	238	16	35	2890	878	5550	140	30	230	25	6.7
28	9.0	163	13	30	1640	863	3700	115	32	71	23	7.0
29	9.4	101	24	30	---	856	1490	83	40	81	28	6.7
30	11	79	143	30	---	874	880	69	35	216	28	5.7
31	9.7	---	201	30	---	1020	---	65	---	341	28	---
TOTAL	324.1	2451.8	1382	3014	33980	51455	102086	8281	2454	1779	7200	321.0
MEAN	10.5	81.7	44.6	97.2	1214	1660	3403	267	81.8	57.4	232	10.7
MAX	20	362	201	593	7340	5850	23000	1310	633	341	1710	28
MIN	7.6	8.6	13	30	30	421	593	65	30	16	16	6.7
CFSM	.01	.09	.05	.11	1.40	1.91	3.92	.31	.09	.07	.27	.01
IN.	.01	.11	.06	.13	1.46	2.21	4.38	.35	.11	.08	.31	.01

CAL YR 1978 TOTAL 267842.7 MEAN 734 MAX 12500 MIN 7.6 CFSM .85 IN 11.48
WTR YR 1979 TOTAL 214727.9 MEAN 588 MAX 23000 MIN 6.7 CFSM .68 IN 9.20

05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT											
05...	1605	80010	--	--	8.8	--	--	16.0	18.5	--	--
12...	1100	17002	17002	--	23	508	7.7	16.0	15.0	--	36
NOV											
13...	1500	17002	17002	--	14	588	8.3	18.5	15.0	--	16
14...	1435	80010	--	--	233	--	--	8.0	11.0	--	--
DEC											
12...	1400	17002	17002	--	22	840	7.8	8.5	1.5	11.8	15
12...	1505	80010	--	--	24	--	--	7.0	2.0	--	--
JAN											
09...	1100	17002	17002	50	--	768	7.6	-6.5	.0	9.0	18
29...	1510	80010	--	--	30	--	--	-4.0	.0	--	--
FEB											
13...	1100	17002	17002	30	--	815	7.7	-3.0	.0	10.2	12
MAR											
06...	1100	17002	17002	--	5020	233	7.6	8.0	2.0	13.3	59
13...	1415	80010	--	--	693	--	--	15.5	5.0	--	--
28...	1200	17002	17002	--	862	570	8.0	15.5	8.0	13.2	19
APR											
19...	1400	17002	17002	--	1080	573	7.7	16.5	14.5	--	17
19...	1500	17002	17002	--	1080	578	7.7	19.0	14.5	--	16
MAY											
01...	1025	80010	--	--	666	--	--	14.0	12.0	--	--
10...	1100	17002	17002	--	238	640	7.9	26.0	23.5	--	15
JUN											
04...	1100	17002	17002	--	51	695	8.1	24.0	23.5	--	19
13...	1250	80010	--	--	68	--	--	28.0	25.0	--	--
25...	1100	17002	17002	--	33	650	8.1	26.0	23.0	--	24
AUG											
02...	1420	80010	--	--	1110	--	--	31.0	26.0	--	--
13...	1100	17002	17002	--	20	445	8.1	26.0	23.5	--	28
SEP											
11...	1230	80010	--	--	11	--	--	31.0	28.5	--	--
17...	1200	17002	17002	--	6.7	570	8.1	24.0	20.0	--	16

05587000 MACOUPIN CREEK NEAR KANE, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUS-PENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
OCT										
12...	.0	190	51	--	356	48	.60	.30	1.7	2.0
NOV										
13...	.0	245	55	--	14	4	.00	.00	--	--
DEC										
12...	.0	226	109	56	9	0	1.2	.60	--	--
JAN										
09...	.0	203	108	36	15	3	1.8	.90	--	--
FEB										
13...	.0	252	104	35	4	1	1.2	1.3	--	--
MAR										
06...	.0	5	39	12	670	44	2.5	.40	--	--
28...	.0	152	86	21	109	13	4.1	.10	--	--
APR										
19...	.0	174	77	18	218	16	3.9	.10	--	--
19...	.0	174	77	18	219	16	3.9	.10	--	--
MAY										
10...	.0	203	88	--	14	0	3.0	.00	--	--
JUN										
04...	.0	258	88	--	27	6	.60	.00	--	--
25...	.0	256	59	--	99	13	.10	.00	--	--
AUG										
13...	.0	168	45	--	53	18	.00	.00	--	--
SEP										
17...	.0	248	52	--	33	6	.00	.00	--	--

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT										
12...	2.6	.60	0	0	0	6400	30	2400	.0	30
NOV										
13...	--	--	--	--	0	610	0	2190	.0	0
DEC										
12...	--	--	--	--	0	730	0	170	.0	0
JAN										
09...	--	--	--	--	0	500	40	630	.0	--
FEB										
13...	--	--	--	--	20	700	0	1170	.0	0
MAR										
06...	--	--	--	--	30	8440	0	530	.0	60
28...	--	--	--	--	10	1700	0	160	.0	10
APR										
19...	--	--	--	--	10	3800	0	300	.0	20
19...	--	--	--	--	10	3800	0	300	.0	20
MAY										
10...	--	--	--	--	0	1400	0	200	.0	10
JUN										
04...	--	--	--	--	0	700	0	1200	.0	0
25...	--	--	--	--	0	2000	0	1800	.1	0
AUG										
13...	--	--	--	--	0	1000	0	930	.0	10
SEP										
17...	--	--	--	--	0	1300	0	3200	.0	10

05587060 ILLINOIS RIVER AT HARDIN, IL

LOCATION.--Lat 39°09'37", long 90°36'55", in NW¼NW¼ sec.26, T.10 S., R.2 W., Calhoun County, Hydrologic Unit 07130011, at bridge on State Highways 16 and 100 in Hardin, 1.6 mi (2.6 km) downstream from Macoupin Creek and at mile 21.5 (34.6 km).

DRAINAGE AREA.--28,690 mi^2 (74,307 km^2).

PERIOD OF RECORD.--Water years 1973 to current year. Additional chemical data for water years 1959-77 are published in Water-Resources Investigations 78-23 and 79-24 as site D 01.

REMARKS.--Water-discharge records from Illinois River at Meredosia (station 05585500) were used to estimate mean daily discharges for this station.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW (CFS) (00060)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)
OCT										
05...	1500	17002	17002	10700	600	8.0	16.0	18.5	--	31
NOV										
14...	1100	17002	17002	5820	765	8.2	13.5	11.0	--	24
DEC										
18...	1400	17002	17002	8240	900	8.1	8.5	1.5	12.8	32
JAN										
29...	1400	17002	17002	8150	1100	7.9	-5.0	.5	--	19
FEB										
20...	1400	17002	17002	8150	990	7.6	4.0	.5	--	19
MAR										
14...	1400	17002	17002	96500	498	7.6	10.0	2.0	--	27
APR										
25...	1200	17002	17002	101000	500	7.8	23.5	16.0	--	20
25...	1400	17002	17002	101000	498	7.9	25.5	16.0	--	20
MAY										
21...	1400	17002	17002	53900	610	8.0	20.5	20.5	--	18
JUN										
18...	1400	17002	17002	20400	745	8.0	31.5	25.5	--	32
JUL										
30...	1300	17002	17002	15500	500	7.7	34.0	28.5	--	22
SEP										
12...	1500	17002	17002	11600	650	8.1	29.0	25.5	--	22

05587060 ILLINOIS RIVER AT HARDIN, IL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	SOLIDS, VOLATILE, SUSPENDED (MG/L) (00535)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT								
05...	--	204	11	2.6	.10	1.3	1.4	4.0
NOV								
14...	--	33	7	2.6	.20	--	--	--
DEC								
18...	71	168	22	2.2	2.1	--	--	--
JAN								
29...	122	45	8	3.1	2.2	--	--	--
FEB								
20...	88	74	8	2.5	2.7	--	--	--
MAR								
14...	44	311	29	2.9	1.0	--	--	--
APR								
25...	26	81	4	5.3	.10	--	--	--
25...	26	84	4	5.4	.10	--	--	--
MAY								
21...	--	87	8	5.7	.00	--	--	--
JUN								
18...	--	276	36	4.9	.00	--	--	--
JUL								
30...	--	134	14	2.9	.00	--	--	--
SEP								
12...	--	85	8	2.1	.00	--	--	--

DATE	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
OCT								
05...	.56	0	0	0	2100	14	.0	20
NOV								
14...	--	--	--	0	2410	100	.0	--
DEC								
18...	.53	0	10	20	4100	0	.0	--
JAN								
29...	--	0	0	0	1000	0	.0	--
FEB								
20...	--	--	--	0	1680	0	.0	--
MAR								
14...	--	--	--	20	5300	0	.0	--
APR								
25...	--	--	--	10	2000	0	.0	--
25...	--	--	--	20	2000	0	.0	--
MAY								
21...	--	--	--	10	1300	0	.0	--
JUN								
18...	--	--	--	20	4200	0	.0	--
JUL								
30...	--	--	--	20	2860	0	.0	--
SEP								
12...	--	--	--	0	1600	0	.1	--

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in time of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in the first table. It is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in the second table.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		Illinois River basin					
		Hydrologic Unit 07120001					
05526150	Kankakee River tributary near Bourbonnais, IL	Lat 41°11'35", long 87°57'00", in SW¼ sec.3, T.31 N., R.11 E., Kankakee County, at culvert on State Highway 102, 4.5 mi (7.2 km) northwest of Bourbonnais.	0.19	1956-57††, 1958-79	10-26-78	16.42	129
		Hydrologic Unit 07120004					
05529300	McDonald Creek near Wheeling, IL	Lat 42°07'14", long 87°56'47", in NW¼NW¼ sec.15, T.42 N., R.11 E., Cook County, at bridge on Schoenbeck Road, 1.0 mi (1.6 km) south of Wheeling. Datum of gage is 658.85 ft (200.817 m).	4.58	1961-79 (discontinued)	04-12-79	3.45	222
05529900	Weller Creek at Mount Prospect, IL	Lat 42°03'32", long 87°57'23", in NE¼SW¼ sec.11, T.41 N., R.11 E., Cook County, at bridge on Lincoln Street at Mount Prospect. Datum of gage is 657.25 ft (200.330 m).	9.02	1961-79 (discontinued)	04-11-79	.83	287
05530300	Willow Creek at Elk Grove Village, IL	Lat 41°59'36", long 87°57'18", in NW¼NW¼ sec.2, T.40 N., R.11 E., Du Page County, at bridge on Devon Avenue at Elk Grove Village, 4.0 mi (6.4 km) south of Arlington Heights. Datum of gage is 663.71 ft (202.299 m).	2.39	1961-69, 1972-79 (discontinued)	08-10-79	3.62	132
05530400	Higgins Creek near Mount Prospect, IL	Lat 42°02'04", long 87°57'35", in NW¼NW¼ sec.23, T.41 N., R.11 E., Cook County, at bridge on Busse Road, 2.3 mi (3.7 km) southwest of Mount Prospect. Datum of gage is 674.18 ft (205.490 m). Prior to Apr. 17, 1973, at datum 1.84 ft (0.561 m) lower.	2.24	1961-79 (discontinued)	04-12-79	.53	115
05530480	Willow Creek at Orchard Place, IL	Lat 41°59'49", long 87°52'47", in SE¼SW¼ sec.33, T.41 N., R.12 E., Cook County, at bridge on State Highway 72, 0.2 mi (0.3 km) south of Orchard Place and 1.5 mi (2.4 km) south of Des Plaines. Datum of gage is 629.85 ft (191.978 m).	18.1	1961-79 (discontinued)	04-12-79	5.38	1,010
05530700	Silver Creek at Melrose Park, IL	Lat 41°54'18", long 87°50'40", in NW¼NW¼ sec.2, T.39 N., R.12 E., Cook County, at bridge on 9th Avenue, 0.3 mi (0.5 km) east of Melrose Park. Datum of gage is 617.45 ft (188.199 m).	11.2	1961-79	04-12-79	2.16	511

†† Continuous stage record, data unpublished.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Illinois River basin--Continued					
05530940	Salt Creek at Palatine, IL	Lat 42°06'38", long 88°03'47", in SW¼SW¼ sec.15, T.42 N., R.10 E., Cook County, at culvert on Chicago Avenue at intersection with Quinten Road in Palatine. Datum of gage is 746.26 ft (227.460 m).	6.26	1961-79	03-04-79	0.87	148
05530960	Salt Creek near Palatine, IL	Lat 42°04'26", long 88°02'38", in NW¼SW¼ sec.35, T.42 N., R.10 E., Cook County, at bridge on Meacham Road, 0.4 mi (0.6 km) north from intersection of Meacham and Algonquin Roads and 2.6 mi (4.2 km) south from Chicago and North Western RR. crossing in Palatine. Datum of gage is 711.61 ft (216.899 m).	16.0	1961-79 (discontinued)	03-04-79	2.30	366
05531020	West Branch Salt Creek at Schaumburg, IL	Lat 42°02'24", long 88°03'10", in NE¼SE¼ sec.14, T.41 N., R.10 E., Cook County, at bridge on State Highway 72, 1.6 mi (2.6 km) northeast of Schaumburg and about 4 mi (6 km) northwest of Roselle. Datum of gage is 719.48 ft (219.298 m). Prior to Apr. 18, 1973, at datum 1.30 ft (0.396 m) higher.	4.83	1961-79 (discontinued)	03-04-79	3.08	228
05531050	Salt Creek near Wood Dale, IL	Lat 41°59'34", long 87°59'44", in NW¼NW¼ sec.4, T.40 N., R.11 E., Du Page County, at bridge on Devon Avenue, 2.0 mi (3.2 km) northwest of Wood Dale. Datum of gage is 677.40 ft (206.472 m).	53.6	1961-79 (discontinued)	03-04-79	5.19	1,740
05531080	Spring Brook at Bloomingdale, IL	Lat 41°57'31", long 88°04'14", in NW¼NW¼ sec.14, T.40 N., R.10 E., Du Page County, at culvert on Circle Avenue, 0.1 mi (0.2 km) north of U.S. Highway 20 and 0.1 mi (0.2 km) east of Bloomingdale. Datum of gage is 707.53 ft (215.655 m). Prior to Sept. 27, 1963, at datum 1.00 ft (0.305 m) higher.	5.08	1961-79 (discontinued)	08-20-79	1.46	180
05531100	Meacham Creek at Medinah, IL	Lat 41°58'39", long 88°02'52", in SW¼ sec.1, T.40 N., R.10 E., Du Page County, at culvert on Chicago, Milwaukee, St. Paul and Pacific RR., 0.2 mi (0.3 km) east of Medinah. Datum of gage is 698.33 ft (212.851 m).	3.94	1956-65, 1966-68††, 1969-72, 1977-79 (discontinued)	03-04-79	12.89	96
05531130	Spring Brook at Walnut Avenue at Itasca, IL	Lat 41°58'16", long 88°00'47", in SE¼NW¼ sec.8, T.40 N., R.11 E., Du Page County, at culvert under intersection of State Highway 19 and Walnut Avenue at Itasca. Datum of gage is 680.44 ft (207.398 m).	13.7	1961-79	03-04-79	1.66	404
05531300	Salt Creek at Elmhurst, IL	Lat 41°53'20", long 87°57'41", in NE¼NE¼ sec.10, T.39 N., R.11 E., Du Page County, at bridge on State Highway 83 at Elmhurst. Datum of gage is 660.49 ft (201.317 m).	90.6	1961-79	03-04-79	5.32	1,520
05531800	Addison Creek at Northlake, IL	Lat 41°54'37", long 87°54'10", in SW¼SW¼ sec.32, T.40 N., R.12 E., Cook County, at bridge on Wolf Road at Northlake, 0.5 mi (0.8 km) north of Melrose Park. Datum of gage is 638.59 ft (194.642 m).	6.79	1961-79	05-03-79	1.18	271

†† Continuous stage record, data unpublished.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05533200	Sawmill Creek tributary near Tiedtville, IL	Lat 41°44'05", long 87°58'00", in NE¼SW¼ sec.34, T.38 N., R.11 E., Du Page County, at culvert on U.S. Highway 66, 0.6 mi (1.0 km) east of Cass Avenue and 2.8 mi (4.5 km) northwest of Tiedtville. Datum of gage is 676.54 ft (206.209 m).	2.33	1961-79 (discontinued)	03-04-79	2.39	276
05533400	Sawmill Creek near Lemont, IL	Lat 41°42'28", long 87°57'45", in NE¼SW¼ sec.10, T.37 N., R.11 E., Du Page County, at bridge on Rocky Glen Road at south edge of Argonne National Laboratory and 2.5 mi (4.0 km) northeast of Lemont. Datum of gage is 641.22 ft (195.444 m).	13.0	1961-79 (discontinued)	03-04-79	1.57	916
		Hydrologic Unit 07120003					
05534600	North Branch Chicago River at Northfield, IL	Lat 42°06'05", long 87°46'26", in NE¼SE¼ sec.24, T.42 N., R.12 E., Cook County, at bridge on Willow Road at Northfield, about 1.5 mi (2.4 km) south of Winnetka. Datum of gage is 622.68 ft (189.793 m).	23.8	1960-79	03-04-79	2.49	471
05535150	Skokie River at Northfield, IL	Lat 42°06'05", long 87°45'33", in NW¼SE¼ sec.19, T.42 N., R.13 E., Cook County, at bridge on Willow Road, below Willow Road dam and at Northfield. Datum of gage is 619.42 ft (188.799 m).	29.1	1960-79 (discontinued)	04-12-79	2.34	414
05535800	North Branch Chicago River at Morton Grove, IL	Lat 42°03'00", long 87°46'50", in SE¼NW¼ sec.17, T.41 N., R.13 E., Cook County, at bridge on Beckwith Road at Morton Grove. Datum of gage is 611.40 ft (186.355 m).	92.2	1960-79 (discontinued)	03-04-79	4.39	1,000
05536201	Thorn Creek at Park Forest, IL	Lat 41°28'19", long 87°40'26", in SW¼SW¼ sec.31, T.35 N., R.14 E., Cook County, at bridge on Western Avenue at Park Forest, 1.5 mi (2.4 km) west of Steger. Datum of gage is 683.57 ft (208.352 m).	6.28	1962-79 (discontinued)	-	(a)	-
05536238	Butterfield Creek near Lincoln Estates, IL	Lat 41°30'22", long 87°46'34", in NE¼SE¼ sec.19, T.35 N., R.13 E., Cook County, at bridge on U.S. Highway 30, 1.5 mi (2.4 km) east of Lincoln Estates and 2.8 mi (4.5 km) west of Matteson. Datum of gage is 697.08 ft (212.470 m). Prior to Apr. 19, 1973, at datum 0.10 ft (0.030 m) higher.	1.77	1961-79 (discontinued)	03-04-79	4.55	573
05536260	Lansing ditch at Sauk Village, IL	Lat 41°29'31", long 87°33'16", in SW¼NW¼ sec.30, T.35 N., R.15 E., Cook County, at bridge on Sauk Trail, at Sauk Village. Datum of gage is 627.02 ft (191.116 m).	3.90	1966-79 (discontinued)	03-04-79	4.91	(†)
05536310	Calumet Union Drainage Canal near Markham, IL	Lat 41°35'48", long 87°39'59", in SE¼NW¼ sec.19, T.36 N., R.14 E., Cook County, at bridge on Dixie Highway at Markham. Datum of gage is 603.54 ft (183.959 m). Prior to November 1971 at datum 0.04 ft (0.012 m) higher.	12.6	1961-79 (discontinued)		(a)	-
05536335	Midlothian Creek near Tinley Park, IL	Lat 41°35'18", long 87°44'52", in NE¼NW¼ sec.28, T.36 N., R.13 E., Cook County, at bridge on 167th Street, 0.6 mi (1.0 km) west of State Highway 50 and 2.0 mi (3.2 km) northeast of Tinley Park. Datum of gage is 658.10 ft (200.589 m). Prior to Oct. 1, 1975, at datum 1.06 ft (0.323 m) higher.	9.13	1954-79 (discontinued)	03-04-79	4.60	273

† Discharge not determined.
a Vandals removed gage.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05536460	Tinley Creek near Oak Forest, IL	Lat 41°37'49", long 87°47'05", in NW¼NE¼ sec.7, T.36 N., R.13 E., Cook County, at bridge on Justamere Road, 2.8 mi (4.5 km) northwest of Oak Forest. Datum of gage is 631.48 ft (192.475 m).	7.95	1961-79 (discontinued)	03-04-79	[b]4.39	260
05536510	Navajo Creek at Palos Heights, IL	Lat 41°39'39", long 87°47'38", in SW¼SW¼ sec.30, T.37 N., R.13 E., Cook County, at bridge on 127th Street at south edge of Palos Heights, 2.5 mi (4.0 km) east of Palos Park. Datum of gage is 613.72 ft (187.062 m).	1.69	1961-79 (discontinued)	03-04-79	2.99	204
05536550	Stony Creek (West) tributary at Oak Lawn, IL	Lat 41°42'56", long 87°45'32", in SW¼NW¼ sec.9, T.37 N., R.13 E., Cook County, at culvert on Edison Avenue and East Shore Drive in Oak Lawn. Datum of gage is 595.90 ft (181.630 m). Prior to May 15, 1973, at datum 4.66 ft (1.420 m) higher.	3.00	1962-79 (discontinued)	08-20-79	4.01	203
05536560	Melvina ditch near Oak Lawn, IL	Lat 41°43'09", long 87°47'07", in NW¼NE¼ sec.7, T.37 N., R.13 E., Cook County, at culvert on 95th Street, 2.2 mi (3.5 km) west of Oak Lawn. Datum of gage is 598.57 ft (182.444 m). Prior to May 15, 1973, at datum 0.91 ft (0.277 m) higher.	5.58	1962-79	08-20-79	4.92	352
05536570	Stony Creek (West) at Worth, IL	Lat 41°42'00", long 87°47'52", in SE¼NE¼ sec.13, T.37 N., R.12 E., Cook County, at bridge on Harlem Avenue, 0.8 mi (1.3 km) north of Worth. Datum of gage is 580.83 ft (177.037 m).	18.0	1962-79 (discontinued)	08-20-79	5.85	(†)
05536630	Mill Creek at Palos Park, IL	Lat 41°40'27", long 87°50'35", in SW¼SE¼ sec.22, T.37 N., R.12 E., Cook County, at bridge on 119th Street at Palos Park. Datum of gage is 623.56 ft (190.061 m). Prior to May 15, 1973, at datum 1.39 ft (0.424 m) higher.	10.8	1961-79 (discontinued)	03-04-79	2.40	762
		Hydrologic Unit 07120004					
05538300	Marley Creek near Mokena, IL	Lat 41°33'35", long 87°54'40", in SE¼SE¼ sec.36, T.36 N., R.11 E., Will County, 200 ft (61 m) south of U.S. Highway 6, 0.5 mi (0.8 km) southwest of intersection with 179th Street and 2.4 mi (3.9 km) northwest of Mokena. Datum of gage is 664.54 ft (202.552 m). Prior to Sept. 30, 1973, at datum 4.51 ft (1.375 m) lower.	9.61	1954-79 (discontinued)	03-04-79	8.16	(†)
05539870	West Branch Du Page River at Ontarioville, IL	Lat 41°58'42", long 88°07'59", in NW¼SE¼ sec.6, T.40 N., R.10 E., Du Page County, at culvert on U.S. Highway 20, 1.2 mi (1.9 km) southeast of Ontarioville. Datum of gage is 770.78 ft (234.934 m).	10.1	1961-79 (discontinued)	03-04-79	3.74	553
05539890	West Branch Du Page River near Wayne, IL	Lat 41°56'37", long 88°10'51", in NW¼NW¼ sec.23, T.40 N., R.9 E., Du Page County, at bridge on Army Trail Road, 0.2 mi (0.3 km) west of Wayne. Datum of gage is 735.31 ft (224.122 m).	23.9	1961-79 (discontinued)	03-04-79	3.58	900

† Discharge not determined.
b Peak stage affected by backwater from ice.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05539950	Klein Creek at Carol Stream, IL	Lat 41°54'24", long 88°08'32", in NE¼SW¼ sec.31, T.40 N., R.10 E., Du Page County, at culvert on State Highway 64 at Carol Stream, 2.5 mi (4.0 km) southwest of Cloverdale. Datum of gage is 739.58 ft (225.424 m). Prior to Sept. 30, 1972, at datum 0.40 ft (0.122 m) higher.	8.81	1961-79 (discontinued)	03-04-79	2.07	412
05540020	Winfield Creek at Winfield, IL	Lat 41°51'26", long 88°08'47", in SE¼SE¼ sec.13, T.39 N., R.9 E., Du Page County, at bridge on State Highway 38, 0.2 mi (0.3 km) east of Winfield. Datum of gage is 718.60 ft (219.029 m). Prior to Sept. 30, 1970, at datum 1.15 ft (0.351 m) lower.	6.95	1961-79 (discontinued)	03-04-79	2.23	(†)
05540030	West Branch Du Page River at West Chicago, IL	Lat 41°51'41", long 88°11'33", in NW¼SE¼ sec.15, T.39 N., R.9 E., Du Page County, at bridge on State Highway 38, 0.1 mi (0.2 km) southeast of West Chicago. Datum of gage is 703.31 ft (214.369 m).	60.2	1961-79 (discontinued)	03-19-79	1.68	1,220
05540060	Kress Creek at West Chicago, IL	Lat 41°51'23", long 88°12'15", in NW¼NW¼ sec.22, T.39 N., R.9 E., Du Page County, at bridge at intersection of Batavia and Joliet Roads, 0.5 mi (0.8 km) southwest of West Chicago. Datum of gage is 705.44 ft (215.018 m).	18.1	1961-79	03-04-79	1.53	418
05540080	Spring Brook at Wheaton, IL	Lat 41°51'02", long 88°06'53", in NE¼SE¼ sec.20, T.39 N., R.10 E., Du Page County, at culvert on Warrenville Road at Wheaton. Datum of gage is 724.13 ft (220.715 m).	2.10	1961-79 (discontinued)	03-04-79	2.26	178
05540110	Ferry Creek at Warrenville, IL	Lat 41°49'13", long 88°11'35", in SW¼NE¼ sec.34, T.39 N., R.9 E., Du Page County, at bridge on State Highway 56 at Warrenville. Datum of gage is 699.27 ft (213.137 m).	4.27	1961-79 (discontinued)	03-04-79	1.98	110
05540140	East Branch Du Page River near Bloomingdale, IL	Lat 41°56'06", long 88°03'29", in SW¼SE¼ sec.23, T.40 N., R.10 E., Du Page County, at culvert on Army Trail Road, 2.0 mi (3.2 km) southeast of Bloomingdale. Datum of gage is 705.35 ft (214.991 m).	3.03	1961-79 (discontinued)	03-04-79	2.05	143
05540150	East Branch Du Page River at Glen Ellyn, IL	Lat 41°53'24", long 88°03'01", in SW¼SW¼ sec.1, T.39 N., R.10 E., Du Page County, at bridge on St. Charles Road, 0.3 mi (0.5 km) east of Glen Ellyn. Datum of gage is 687.66 ft (209.599 m). Prior to Apr. 15, 1971, at datum 1.00 ft (0.305 m) higher.	14.2	1961-79	03-04-79	1.28	360
05540190	St. Joseph Creek at Belmont, IL	Lat 41°47'31", long 88°02'15", in NW¼SE¼ sec.12, T.38 N., R.10 E., Du Page County, at bridge on Belmont Avenue at Belmont. Datum of gage is 687.04 ft (209.410 m).	8.80	1961-79 (discontinued)	-	(c)	-
05540240	Prentiss Creek near Lisle, IL	Lat 41°46'17", long 88°04'11", in SW¼SW¼ sec.14, T.38 N., R.10 E., Du Page County, at bridge on State Highway 53, 1.0 mi (1.6 km) south of Lisle. Datum of gage is 660.29 ft (201.256 m).	6.48	1961-79	03-04-79	.33	117

† Discharge not determined.
c Gage removed because of construction.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Annual maximum Discharge (ft^3/s)
		Illinois River basin--Continued					
		Hydrologic Unit 07120005					
05541750	Mazon River tributary near Gardner, IL	Lat 41°09'36", long 88°20'35", in SE¼ sec.18, T.31 N., R.8 E., Grundy County, at Illinois Central Gulf RR., 2.7 mi (4.3 km) southwest of Gardner.	4.52	1959-69, 1970-74††, 1975-79	04-12-79	15.25	173
		Hydrologic Unit 07120006					
05548100	Nippersink Creek at Greenwood, IL	Lat 42°23'16", long 88°23'24", in SW¼SW¼ sec.11, T.45 N., R.7 E., McHenry County, at bridge on Greenwood Road at south edge of Greenwood. Datum of gage is 819.78 ft (249.869 m).	83.2	1965-79 (discontinued)	03-19-79	.68	768
05549890	Spring Creek at Fox River Grove, IL	Lat 42°11'14", long 88°13'40", in SW¼ sec.19, T.43 N., R.9 E., McHenry County, at bridge on Plum Tree Road, 0.9 mi (1.4 km) southwest of Fox River Grove. Datum of gage is 743.48 ft (226.613 m). Prior to May 12, 1976, at datum 0.63 ft (0.192 m) lower.	24.8	1962-79 (discontinued)	08-18-79	1.17	372
05549900	Fox River tributary near Cary, IL	Lat 42°11'48", long 88°15'54", in NW¼NE¼ sec.23, T.43 N., R.8 E., McHenry County, at culvert on Cary-Algonquin Road, 1.3 mi (2.1 km) southwest of Cary. Datum of gage is 858.14 ft (261.561 m).	.07	1956-64, 1965-74††, 1975-79	08-10-79	13.03	3.4
05550240	Pingree Creek near Udina, IL	Lat 42°03'22", long 88°24'20", in NW¼NE¼ sec.11, T.41 N., R.7 E., Kane County, at bridge on U.S. Highway 20, 1.7 mi (2.7 km) northwest of Udina. Datum of gage is 899.08 ft (274.040 m).	8.36	1962-79	03-19-79	2.88	232
05550280	Tyler Creek near Gilberts, IL	Lat 42°04'21", long 88°21'26", in NE¼SE¼ sec.36, T.42 N., R.7 E., Kane County, at bridge on Big Timber Road, 2.3 mi (3.7 km) southeast of Gilberts. Datum of gage is 858.61 ft (261.704 m).	28.7	1962-79 (discontinued)	03-19-79	3.08	350
05550300	Tyler Creek at Elgin, IL	Lat 42°03'31", long 88°18'14", in SE¼SE¼ sec.3, T.41 N., R.8 E., Kane County, at bridge on Big Timber Road in Elgin. Datum of gage is 752.36 ft (229.319 m).	38.9	1962-79	08-10-79	1.34	432
05550400	Poplar Creek near Bartlett, IL	Lat 42°03'52", long 88°09'17", in W½ sec.1, T.41 N., R.9 E., Cook County, at bridge on State Highway 72, 0.6 mi (1.0 km) northwest of Barrington Road and 4.5 mi (7.2 km) north of Bartlett. Datum of gage is 803.12 ft (244.791 m).	6.27	1954-59, 1962-79 (discontinued)	03-19-79	1.82	(†)
05550470	Poplar Creek tributary near Bartlett, IL	Lat 42°01'28", long 88°12'10", in SE¼NE¼ sec.21, T.41 N., R.9 E., Cook County, at culvert on State Highway 59, about 3 mi (5 km) northwest of Bartlett. Datum of gage is 773.37 ft (235.723 m).	4.55	1961-79 (discontinued)	03-19-79	3.53	346
		Hydrologic Unit 07120007					
05551030	Brewster Creek at Valley View, IL	Lat 41°58'22", long 88°16'50", in SW¼SW¼ sec.1, T.40 N., R.8 E., Kane County, at bridge on State Highway 25 at Valley View, 2.5 mi (4.0 km) southeast of South Elgin. Datum of gage is 710.08 ft (216.432 m).	14.0	1962-79 (discontinued)	08-10-79	.82	352

† Discharge not determined.
†† Continuous stage record, data unpublished.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05551050	Norton Creek near Wayne, IL	Lat 41°56'54", long 88°16'17", in NW¼SE¼ sec.13, T.40 N., R.8 E., Kane County, at culvert on Dunham Road, 1.6 mi (2.6 km) west of Wayne. Datum of gage is 731.54 ft (222.973 m). Prior to July 19, 1963, at datum 0.50 ft (0.152 m) lower.	7.35	1962-79 (discontinued)	03-19-79	3.22	194
05551060	Norton Creek near St. Charles, IL	Lat 41°56'42", long 88°18'22", in SW¼SE¼ sec.15, T.40 N., R.8 E., Kane County, at bridge on State Highway 25, 2.0 mi (3.2 km) north of St. Charles. Datum of gage is 692.66 ft (211.123 m). Oct. 2, 1961, to July 17, 1963, at datum 1.13 ft (0.344 m) lower; July 18, 1963, to Dec. 1, 1967, at datum 0.44 ft (0.134 m) lower.	11.5	1962-79 (discontinued)	08-10-79	2.31	149
05551100	Ferson Creek at Wasco, IL	Lat 41°57'10", long 88°24'29", in NE¼NW¼ sec.14, T.40 N., R.7 E., Kane County, at culvert on Burlington Road, 1.0 mi (1.6 km) north of Wasco. Datum of gage is 800.63 ft (244.032 m). Prior to May 2, 1974, at datum 1.00 ft (0.305 m) higher.	6.13	1962-79 (discontinued)	08-10-79	2.03	253
05551140	Bowes Creek at Bowes, IL	Lat 42°00'14", long 88°25'34", in SE¼NW¼ sec.26, T.41 N., R.7 E., Kane County, at bridge on Crawford Road, 1.9 mi (3.1 km) west of Bowes. Datum of gage is 866.82 ft (264.207 m).	5.43	1961-79 (discontinued)	03-19-79	1.93	237
05551180	Ferson Creek near Fox River Heights, IL	Lat 41°57'20", long 88°21'22", in NW¼NW¼ sec.17, T.40 N., R.8 E., Kane County, at bridge on Bolcum Road, 2.9 mi (4.7 km) southwest of Fox River Heights. Datum of gage is 746.20 ft (227.442 m).	46.4	1962-79 (discontinued)	03-19-79	4.24	762
05551300	Mill Creek near Wasco, IL	Lat 41°54'22", long 88°24'16", in SE¼NW¼ sec.35, T.40 N., R.7 E., Kane County, at bridge on State Highway 38, 2.2 mi (3.5 km) south of Wasco. Datum of gage is 764.75 ft (233.096 m).	8.14	1961-79 (discontinued)	08-10-79	2.35	(†)
05551320	Mill Creek near La Fox, IL	Lat 41°51'53", long 88°22'23", in NE¼NW¼ sec.18, T.39 N., R.8 E., Kane County, at bridge on Kaneville Road, 2.5 mi (4.0 km) southeast of La Fox and 3.5 mi (5.6 km) northwest of Batavia. Datum of gage is 705.04 ft (214.896 m).	20.5	1961-79	03-19-79	2.70	465
05551520	Indian Creek near North Aurora, IL	Lat 41°48'50", long 88°16'26", in SE¼SW¼ sec.36, T.39 N., R.8 E., Kane County, at bridge on State Highway 56, 2.5 mi (4.0 km) east of North Aurora. Datum of gage is 728.68 ft (222.102 m).	5.21	1961-79 (discontinued)	08-10-79	1.47	227
05551530	Indian Creek at Aurora, IL	Lat 41°45'59", long 88°18'24", in NW¼NE¼ sec.22, T.38 N., R.8 E., Kane County, at culvert on State Highway 25 at Aurora. Datum of gage is 634.80 ft (193.487 m).	16.7	1961-79 (discontinued)	08-10-79	4.95	696

† Discharge not determined.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05551620	Blackberry Creek near Kaneville, IL	Lat 41°48'17", long 88°27'34", in SW¼NE¼ sec.5, T.38 N., R.7 E., Kane County, at bridge on State Highway 47, about 3 mi (5 km) southeast of Kaneville. Datum of gage is 697.47 ft (212.589 m). Prior to May 3, 1973, at datum 1.26 ft (0.384 m) higher.	21.6	1961-79 (discontinued)	03-20-79	2.35	511
05551640	Blackberry Creek near Sugar Grove, IL	Lat 41°46'30", long 88°24'47", in SW¼NW¼ sec.14, T.38 N., R.7 E., Kane County, at bridge on State Highway 56, 1.9 mi (3.1 km) northeast of Sugar Grove. Datum of gage is 672.01 ft (204.829 m).	29.6	1961-79 (discontinued)	03-20-79	2.84	440
05551660	Lake Run near Mooseheart, IL	Lat 41°48'40", long 88°24'09", in SW¼SE¼ sec.35, T.39 N., R.7 E., Kane County, at bridge on Tanner Road, 2.5 mi (4.0 km) south of Bald Mound and 4.0 mi (6.4 km) southwest of Mooseheart. Datum of gage is 682.00 ft (207.874 m).	11.0	1961-79 (discontinued)	03-19-79	2.48	106
05551800	Fox River tributary No. 2 near Fox, IL	Lat 41°36'28", long 88°28'43", in NE¼SW¼ sec.7, T.36 N., R.7 E., Kendall County, at culvert on State Highway 71, 1.5 mi (2.4 km) southeast of Fox and 2.5 mi (4.0 km) southwest of Yorkville.	.45	1961-68, 1969-74††, 1975-79	-	(d)	-
05551900	East Branch Big Rock Creek near Big Rock, IL	Lat 41°46'04", long 88°34'11", in NE¼SE¼ sec.17, T.38 N., R.6 E., Kane County, at bridge on U.S. Highway 30, 1.2 mi (1.9 km) northwest of Big Rock. Datum of gage is 700.43 ft (213.491 m). Prior to Sept. 21, 1970, at datum 0.28 ft (0.085 m) lower.	32.6	1965-79 (discontinued)	03-19-79	2.13	889
05551930	Welch Creek near Big Rock, IL	Lat 41°45'36", long 88°30'38", in SE¼NE¼ sec.23, T.38 N., R.6 E., Kane County, at bridge on Granart Road, 2.0 mi (3.2 km) southeast of Big Rock. Datum of gage is 684.11 ft (208.517 m).	22.1	1965-79	03-19-79	2.43	402
		Hydrologic Unit 07130002					
05554000	North Fork Vermilion River near Charlotte, IL	Lat 40°50'08", long 88°17'58", in SE¼SE¼ sec.4, T.27 N., R.8 E., Livingston County, at Foreman highway bridge, 1.2 mi (1.9 km) northwest of Charlotte, 5.5 mi (8.8 km) north of Chatsworth. Datum of gage is 638.00 ft (194.462 m).	186	1943-62**, 1963-79	03-05-79	[b]15.35	3,500
		Hydrologic Unit 07130001					
05557000	West Bureau Creek at Wyanet, IL	Lat 41°21'54", long 89°34'08", in NE corner of sec.21, T.16 N., R.8 E., Bureau County, on left bank at upstream side of bridge on U.S. Highways 6 and 34, 0.5 mi (0.8 km) east of Wyanet. Datum of gage is 573.14 ft (174.693 m).	86.7	1936-66**, 1967-79	03-20-79	9.80	3,450
05557100	West Bureau Creek tributary near Wyanet, IL	Lat 41°18'40", long 89°35'20", in SE¼ sec.5, T.15 N., R.8 E., Bureau County, at culvert on county road, 3.6 mi (5.8 km) south of Wyanet.	.33	1956-63, 1964-74††, 1975-79	08-20-79	24.67	243

** Continuous-record gaging station.
†† Continuous stage record, data unpublished.
b Peak stage affected by backwater from ice.
d Peak stage did not reach bottom of gage.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		Illinois River basin--Continued					
05557500	East Bureau Creek near Bureau, IL	Lat 41°20'06", long 89°22'53", in NW¼NE¼ sec.31, T.16 N., R.10 E., Bureau County, on left bank at downstream side of bridge, 0.5 mi (0.8 km) downstream from Brush Creek, 2.5 mi (4.0 km) upstream from mouth, and 3.5 mi (5.6 km) north of Bureau. Datum of gage is 484.45 ft (147.660 m).	99.0	1936-66**, 1967-79	08-20-79	14.99	3,550
05558075	Coffee Creek tributary near Hennepin, IL	Lat 41°14'35", long 89°18'25", near center of sec.14, T.32 N., R.2 W., Putnam County, at culvert on county road, 1.9 mi (3.1 km) southeast of Hennepin.	.22	1956-63, 1964-74††, 1975-79	08-20-79	20.89	147
05558500	Crow Creek (West) near Henry, IL	Lat 41°09'00", long 89°25'00", in SW¼SE¼ sec.36, T.14 N., R.9 E., Putnam County, on right bank at downstream side of bridge No. 7, 2.0 mi (3.2 km) upstream from Sugar Grove Creek, 2.4 mi (3.9 km) west of State Highway 29, and 3.6 mi (5.8 km) northwest of Henry. Datum of gage is 520.61 ft (158.682 m).	56.2	1949-71**, 1972-79	03-29-79	3.84	544
05559000	Gimlet Creek at Sparland, IL	Lat 41°01'35", long 89°26'20", in SE¼NW¼ sec.14, T.12 N., R.9 E., Marshall County, on left bank 120 ft (37 m) upstream from bridge on State Highway 29 and 200 ft (61 m) upstream from Rock Island RR. bridge in Sparland. Datum of gage is 454.55 ft (138.547 m).	5.66	1946-47**, 1950-71**, 1972-79	03-29-79	e6.75	400
05559500	Crow Creek near Washburn, IL	Lat 40°57'15", long 89°18'30", in SW¼ sec.23, T.29 N., R.2 W., Marshall County, on left bank at downstream side of highway bridge, 200 ft (61 m) downstream from Atchison, Topeka and Santa Fe RR. bridge, 2.0 mi (3.2 km) downstream from unnamed tributary, and 2.5 mi (4.0 km) northwest of Washburn. Datum of gage is 557.70 ft (169.987 m).	115	1945-71**, 1972-79	03-29-79	7.97	2,550
		Hydrologic Unit 07130003					
05563000	Kickapoo Creek near Kickapoo, IL	Lat 40°48'00", long 89°48'00", in SW¼SE¼ sec.34, T.10 N., R.6 E., Peoria County, at bridge on U.S. Highway 150, 0.8 mi (1.3 km) upstream from mouth of the West Fork of Kickapoo Creek and 2.5 mi (4.0 km) northwest of Kickapoo. Datum of gage is 514.85 ft (156.926 m).	119	1945-62**, 1963-79	03-05-79	11.23	3,720
05563100	Kickapoo Creek tributary near Kickapoo, IL	Lat 40°47'40", long 89°46'30", in NW¼ sec.1, T.9 N., R.6 E., Peoria County, at culvert on U.S. Highway 150, 1.2 mi (1.9 km) west of Kickapoo.	.07	1956-63, 1964-66††, 1967-79	04-11-79	14.73	(†)
05563500	Kickapoo Creek at Peoria, IL	Lat 40°40'52", long 89°39'19", in NE¼NW¼ sec.13, T.8 N., R.7 E., Peoria County, on right bank at downstream side of pier of bridge on State Highway 116, 0.5 mi (0.8 km) west of Peoria, 1.5 mi (2.4 km) downstream from Dry Run, and 4.0 mi (6.4 km) upstream from mouth. Datum of gage is 448.37 ft (136.663 m).	297	1942-71**, 1972-79	04-11-79	13.67	5,270

** Continuous-record gaging station.
† Discharge not determined.
†† Continuous stage record, data unpublished.
e Peak stage affected by backwater from Illinois River.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
		Hydrologic Unit 07130004					
05567000	Panther Creek near El Paso, IL	Lat 40°46'05", long 89°04'30", in center of sec.26, T.27 N., R.1 E., Woodford County, at bridge on county road just below East Branch Panther Creek and 3.8 mi (6.1 km) northwest of El Paso. Datum of gage is 658.86 ft (200.821 m).	93.9	1950-60**, 1961-79	03-02-79	12.07	5,800
05568000	Mackinaw River near Green Valley, IL	Lat 40°26'43", long 89°39'10", in SE¼NW¼ sec.15, T.23 N., R.5 W., Tazewell County, at bridge on State Highway 29, 3.0 mi (4.8 km) north of Green Valley and 13 mi (21 km) upstream from mouth. Datum of gage is 477.10 ft (145.420 m). Prior to Sept. 30, 1952, at datum 2.00 ft (0.610 m) higher.	1,089	1921-56**, 1957-58, 1960-79	03-05-79	14.15	23,400
		Hydrologic Unit 07130005					
05569825	Cedar Creek tributary at St. Augustine, IL	Lat 40°43'20", long 90°24'40", in E½ sec.32, T.9 N., R.1 E., Knox County, at culvert on Burlington Northern, 0.1 mi (0.2 km) north of St. Augustine.	4.06	1956-62, 1963-70††, 1971-79	04-26-79	17.24	400
		Hydrologic Unit 07130007					
05574000	South Fork Sangamon River near Nokomis, IL	Lat 39°21'12", long 89°15'05", in NE¼SE¼ sec.36, T.11 N., R.2 W., Christian County, on right bank at downstream side of highway bridge, 0.7 mi (1.1 km) upstream from small tributary and 4.0 mi (6.4 km) northeast of Nokomis. Datum of gage is 641.35 ft (195.483 m).	11.0	1951-75**, 1976-79	04-12-79	12.59	3,030
05575500	South Fork Sangamon River at Kincaid, IL	Lat 39°34'44", long 89°23'31", in SW¼NE¼ sec.14, T.13 N., R.3 W., Christian County, at bridge on State Highway 104, 1.0 mi (1.6 km) southeast of Kincaid. Datum of gage is 538.65 ft (164.181 m).	562	1917-27**, 1929-30**, 1933**, 1945-61**, 1962-79	04-12-79	27.45	17,500
		Hydrologic Unit 07130008					
05576500	Sangamon River at Riverton, IL	Lat 39°50'34", long 89°32'52", in NE¼ sec.16, T.16 N., R.4 W., Sangamon County, at bridge on former U.S. Highway 36 at Riverton, 4.5 mi (7.2 km) downstream from South Fork. Datum of gage is 508.38 ft (154.954 m).	2,618	1908-12**, 1915-27**, 1929-31**, 1933-56**, 1957-79	04-12-79	26.78	44,200
05577700	Sangamon River tributary at Andrew, IL	Lat 39°53'45", long 89°38'50", near center of sec.27, T.17 N., R.5 W., Sangamon County, at culvert on Andrew Road, 0.5 mi (0.8 km) west of Andrew.	1.50	1956-60, 1961-65††, 1966-71, 1972-74††, 1975-79	04-11-79	17.16	660
		Hydrologic Unit 07130009					
05580500	Kickapoo Creek near Lincoln, IL	Lat 40°11'30", long 89°21'40", in NE¼NW¼ sec.18, T.20 N., R.2 W., Logan County, on left bank at downstream side of highway bridge, 1,000 ft (305 m) upstream from Illinois Terminal Railroad, 3.0 mi (4.8 km) north of Lincoln, and 7.5 mi (12.1 km) upstream from mouth. Datum of gage is 557.08 ft (169.798 m).	306	1945-71**, 1972-79	04-12-79	16.55	23,200

** Continuous-record gaging station.
†† Continuous stage record, data unpublished.

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (ft^3/s)
		Illinois River basin--Continued					
05581500	Sugar Creek near Hartsburg, IL	Lat 40°13'20", long 89°24'12", in SE¼SW¼ sec.35, T.21 N., R.3 W., Logan County, on right bank at downstream side of bridge on county road, 0.4 mi (0.6 km) upstream from State Highway 121, 2.6 mi (4.2 km) southwest of Hartsburg, 4.1 mi (6.6 km) northwest of Lincoln, and 6.6 mi (10.6 km) downstream from West Fork. Datum of gage is 548.70 ft (167.244 m).	333	1945-71**, 1972-79	03-04-79	[b]15.85	17,200
		Hydrologic Unit 07130008					
05582500	Crane Creek near Easton, IL	Lat 40°14'46", long 89°51'40", in NE¼NW¼ sec.26, T.21 N., R.7 W., Mason County, on right downstream wingwall of county road bridge, 0.1 mi (0.2 km) downstream from confluence of Hardin and Central ditches, 1.2 mi (1.9 km) upstream from Samuels ditch, and 1.2 mi (1.9 km) northwest of Easton. Datum of gage is 486.78 ft (148.371 m).	26.5	1950-75**, 1976-79	03-03-79	8.54	534
		Hydrologic Unit 07130011					
05585220	Indian Creek tributary near Sinclair, IL	Lat 39°48'42", long 90°06'15", in NW¼ sec.27, T.16 N., R.9 W., Morgan County, at culvert on Illinois Central Gulf RR., 1.0 mi (1.6 km) northeast of Sinclair.	3.58	1956-61, 1962-68††, 1969-79	04-12-79	19.43	922
05586000	North Fork Mauvaise Terre Creek near Jacksonville, IL	Lat 39°45'38", long 90°08'07", in SE¼NW¼ sec.8, T.15 N., R.9 W., Morgan County, on left bank at downstream side of county road bridge, 2.5 mi (4.0 km) north of Arnold, 4.5 mi (7.2 km) upstream from mouth, and 6.0 mi (9.7 km) east of Jacksonville. Datum of gage is 579.27 ft (176.561 m).	29.1	1950-75**, 1976-79	04-12-79	9.98	1,880
05586200	Illinois River tributary at Florence, IL	Lat 39°37'55", long 90°37'05", in NE¼NW¼ sec.15, T.5 S., R.2 W., Pike County, at culvert on U.S. Highway 36, 0.7 mi (1.1 km) northwest of Florence.	.49	1956-60, 1961-68††, 1969-79	04-12-79	20.35	478
05586500	Hurricane Creek near Roodhouse, IL	Lat 39°29'20", long 90°25'00", in NE¼ sec.15, T.12 N., R.12 W., Greene County, on left bank 150 ft (46 m) downstream from bridge on State Highway 106, 2.0 mi (3.2 km) west of Roodhouse. Datum of gage is 597.16 ft (182.014 m).	2.30	1961-75**, 1976-79	04-24-79	9.07	307
		Hydrologic Unit 07130012					
05586850	Bear Creek tributary near Reeders, IL	Lat 39°17'40", long 90°01'05", in SE¼ sec.19, T.10 N., R.8 W., Macoupin County, at culvert on State Highway 108, 1.5 mi (2.4 km) southeast of Reeders.	.02	1956-60, 1961-68††, 1969-79	04-11-79	18.35	21

** Continuous-record gaging station.
†† Continuous stage record, data unpublished.
b Peak stage affected by backwater from ice.

Measurements of streamflow at points other than gaging stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1979

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		ILLINOIS RIVER BASIN				
		Hydrologic Unit 07130003				
05568450	Little Lamarsh Creek at Mapleton, IL	Lat 40°33'48", long 89°44'36", in SW¼NE¼ sec.30, T.7 N., R.6 W., Peoria County, at bridge on old U.S. Highway 24, 0.5 mi (0.8 km) west of Mapleton and 0.8 mi (1.3 km) upstream from mouth.	8.06	1975	07-18-79 08-03-79	0.18 .41
05568675	Buckheart Creek near Liverpool, IL	Lat 40°25'13", long 90°00'30", in SW¼NW¼ sec.13, T.5 N., R.4 E., Fulton County, at bridge on State Highway 23, 2.0 mi (3.2 km) north of Liverpool and 2.0 mi (3.2 km) upstream from Illinois River.	16.8	-	07-17-79 08-02-79	2.5 7.6
		Hydrologic Unit 07130005				
05568765	East Fork Spoon River at Modena, IL	Lat 41°08'53", long 89°45'30", in SW¼SE¼ sec.36, T.14 N., R.6 E., Stark County, at bridge on county road, 0.8 mi (1.3 km) upstream from Spoon River, 0.9 mi (1.4 km) northeast of Modena, and 1.0 mi (1.6 km) downstream from Cooper's Defeat Creek.	92.5	-	07-17-79 08-02-79 08-28-79	50 11 25
05568772	Jack Creek at Modena, IL	Lat 41°08'05", long 89°46'40", in NW¼NE¼ sec.11, T.13 N., R.6 E., Stark County, at bridge on county road, 0.8 mi (1.3 km) upstream from Spoon River and 1.0 mi (1.6 km) west of Modena.	15.7	1975	07-17-79 08-02-79 08-28-79	6.7 4.1 2.4
05568778	Spoon River near Stark, IL	Lat 41°01'05", long 89°46'12", in NW¼NW¼ sec.24, T.12 N., R.6 E., Stark County, at bridge on county road, 0.8 mi (1.3 km) upstream from Camp Run, 2.0 mi (3.2 km) northwest of Stark, and 3.6 mi (5.8 km) upstream from Indian Creek.	209	-	07-17-79 08-02-79 08-30-79	118 38 62
05568855	Walnut Creek near Victoria, IL	Lat 41°04'14", long 90°02'33", in SE¼NE¼ sec.33, T.13 N., R.4 E., Knox County, at bridge on State Highway 180, 3.9 mi (6.3 km) northeast of Victoria, 5.3 mi (8.5 km) upstream from Fitch Creek, and 8.2 mi (13.2 km) downstream from Forman Creek.	102	-	07-17-79 08-01-79 08-30-79	26 13 4.2
05568895	Snakeden Hollow near Dahinda, IL	Lat 40°57'34", long 90°04'15", in NE¼NW¼ sec.8, T.11 N., R.4 E., Knox County, at bridge on county road, 1.5 mi (2.4 km) upstream from Spoon River and 3.0 mi (4.8 km) northeast of Dahinda.	9.82	1975	07-16-79 08-01-79 08-29-79	4.0 1.9 1.4
05568910	Sugar Creek at Dahinda, IL	Lat 40°55'40", long 90°07'00", in SW¼NW¼ sec.24, T.11 N., R.3 E., Knox County, at bridge 100 ft (30 m) upstream of Court Creek, 0.6 mi (1.0 km) northwest of Dahinda, and 1.1 mi (1.8 km) upstream of Spoon River.	21.6	1975	07-16-79 08-01-79 08-29-79	.38 .61 .35
05568935	Hickory Creek near Douglas, IL	Lat 40°46'36", long 90°06'03", in NW¼SW¼ sec.7, T.9 N., R.4 E., Knox County, on county road bridge, 0.8 mi (1.3 km) southwest of Douglas and 2.7 mi (4.3 km) upstream from Spoon River.	5.38	-	07-17-79 08-03-79	2.0 2.3

Discharge measurements made at miscellaneous sites during water year 1979--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		ILLINOIS RIVER BASIN--Continued				
05569455	Littlers Creek near Maquon, IL	Lat 40°44'08", long 90°12'00", in NW¼SE¼ sec.30, T.9 N., R.3 E., Knox County, at bridge on county road, 2.2 mi (3.5 km) upstream from Spoon River, 3.5 mi (5.6 km) downstream from Flea Creek, and 4.6 mi (7.4 km) southwest of Maquon.	36.2	-	07-17-79 08-03-79	3.0 7.6
05569920	Coal Creek near Fairview, IL	Lat 40°39'33", long 90°14'00", in NW¼SE¼ sec.23, T.8 N., R.2 E., Fulton County, on county road bridge, 0.2 mi (0.3 km) upstream from unnamed tributary and 3.9 mi (6.3 km) northwest of Fairview.	28.2	1975	07-17-79 08-02-79	2.2 4.6
05569953	Put Creek near Canton, IL	Lat 40°34'17", long 90°06'51", in NE¼SW¼ sec.24, T.7 N., R.3 E., Fulton County, on county road bridge, 4.7 mi (7.6 km) northwest of Canton, 12.6 mi (20.3 km) upstream from Spoon River.	6.06	-	07-17-79 08-02-79	.26 1.2
		Hydrologic Unit 07130003				
05570570	Otter Creek near Vermont, IL	Lat 40°17'29", long 90°23'38", in SE¼SE¼ sec.28, T.4 N., R.1 E., Fulton County, at bridge on county road, 1.5 mi (2.4 km) east of Vermont and 4.4 mi (7.1 km) upstream from South Branch Otter Creek.	14.3	-	07-16-79 08-02-79	.10 .05
		Hydrologic Unit 07130007				
05575050	Bear Creek near Palmer, IL	Lat 39°28'50", long 89°25'30", in NE¼NE¼ sec.21, T.12 N., R.3 W., Christian County, at bridge on county road, 0.3 mi (0.5 km) upstream of Prairie Fork and 1.8 mi (2.9 km) northwest of Palmer.	60.0	-	07-05-79 07-30-79	2.1 11
05576190	Sugar Creek near Glenarm, IL	Lat 39°36'49", long 89°41'05", in SW¼SW¼ sec.32, T.14 N., R.5 W., Sangamon County, 1.4 mi (2.3 km) downstream from unnamed tributary, 2.0 mi (3.2 km) southwest of Glenarm, and 7.5 mi (12.1 km) downstream from mouth of Lake Springfield.	57.5	-	08-01-79	210
		Hydrologic Unit 07130012				
05586630	Macoupin Creek near Standard City, IL	Lat 39°20'51", long 89°44'08", in NE¼NW¼ sec.2, T.10 N., R.6 W., Macoupin County, at bridge 0.9 mi (1.4 km) downstream from Horse Creek, 2.5 mi (4.0 km) east of Standard City, and 4.7 mi (7.6 km) upstream from Shaw Point Branch.	73.8	-	07-05-79 08-01-79	.96 54
05586860	Bear Creek at Chesterfield, IL	Lat 39°16'07", long 90°04'11", in NW¼SW¼ sec.35, T.9 N., R.9 W., Macoupin County, on county road bridge, 0.5 mi (0.8 km) north of Chesterfield and 3.3 mi (5.3 km) upstream from Hodges Creek.	26.7	1963-66	06-19-79 07-31-79	.06 1.9
05586890	Hodges Creek near Rockbridge, IL	Lat 39°16'10", long 90°10'11", in NE¼SE¼ sec.35, T.9 N., R.10 W., Greene County, on county road bridge, 1.6 mi (2.6 km) east of Rockbridge, 1.7 mi (2.7 km) downstream from Bear Creek, and 1.7 mi (2.7 km) upstream from Macoupin Creek.	233	1963-67	06-19-79 07-31-79	6.1 20

The following table contains annual maximum gage heights for crest-stage gages on streams that are located in the Cook County area of northeastern Illinois.

The date of the maximum flood at a crest-stage station is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum flood for the water year is shown. Information of lower floods may have been determined but are not published herein. Miles above mouth, as measured along low-water channel on topographic maps, is listed for each station.

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Annual maximum Date	Annual maximum Gage height (feet)
		Illinois River basin					
		Hydrologic Unit 07120004					
05528400	Des Plaines River at Wheeling, IL	SW¼SW¼ sec.1, T.42 N., R.11 E., Cook County, at bridge on State Highway 68 at Wheeling. Datum of gage is 633.98 ft (193.237 m). Prior to Apr. 18, 1973, at datum 1.03 ft (0.31 m) higher.	325	74.34	1962-79 (discontinued)	03-04-79	4.15
05528530	Wheeling Drainage ditch at Wheeling, IL	SE¼SW¼ sec.2, T.42 N., R.11 E., Cook County, at bridge on State Highway 68 at Wheeling. Datum of gage is 639.41 ft (194.892 m).	21.8	2.32	1961-79 (discontinued)	03-04-79	1.40
05530200	Des Plaines River at Park Ridge, IL	NW¼NW¼ sec.34, T.41 N., R.12 E., Cook County, at bridge on Touhy Avenue, 0.5 mi (0.8 km) west of Park Ridge. Datum of gage is 620.60 ft (189.159 m).	409	62.00	1962-79 (discontinued)	03-04-79	5.31
05530550	Crystal Creek near Schiller Park, IL	SW¼NW¼ sec.16, T.40 N., R.12 E., Cook County, at culvert on U.S. Highways 12 and 45, 0.3 mi (0.5 km) west of Schiller Park. Datum of gage is 634.21 ft (193.307 m). Prior to Feb. 2, 1968, at datum 0.30 ft (0.09 m) lower.	3.26	2.21	1962-79 (discontinued)	03-04-79	1.72
05530570	Crystal Creek at Schiller Park, IL	NW¼NW¼ sec.15, T.40 N., R.12 E., Cook County, at bridge on River Road at Schiller Park. Datum of gage is 618.84 ft (188.622 m). Prior to Apr. 18, 1973, at datum 3.00 ft (0.91 m) higher.	5.16	.43	1961-79 (discontinued)	08-10-79	1.07
05530600	Des Plaines River at River Grove, IL	NW¼SW¼ sec.26, T.40 N., R.12 E., Cook County, at bridge on Grand Avenue at River Grove. Datum of gage is 612.93 ft (186.821 m).	451	55.10	1961-79 (discontinued)	03-04-79	7.23
05530660	Silver Creek at Franklin Park, IL	SW¼NE¼ sec.29, T.40 N., R.12 E., Cook County, at bridge on Grand Avenue, 0.3 mi (0.5 km) west of Franklin Park. Datum of gage is 638.03 ft (194.472 m).	6.91	4.65	1961-79 (discontinued)	08-10-79	2.19
05530980	Arlington Heights Branch Salt Creek at Palatine, IL	Near center of SW¼ sec.24, T.42 N., R.10 E., Cook County, at culvert on U.S. Highway 14, 0.3 mi (0.5 km) southeast of Palatine. Datum of gage is 709.80 ft (216.347 m).	9.76	2.84	1961-64, 1967-79 (discontinued)	03-04-79	2.91
05531040	West Branch Salt Creek near Roselle, IL	NW¼NW¼ sec.30, T.41 N., R.11 E., Cook County, at bridge on Interstate Highway 90, 4.0 mi (6.4 km) northeast of Roselle. Datum of gage is 691.22 ft (210.684 m).	11.8	1.46	1961-79 (discontinued)	03-04-79	3.36
		Hydrologic Unit 07120003					
05535100	Skokie River at Glencoe, IL	NE¼NW¼ sec.12, T.42 N., R.12 E., Cook County, at bridge on State Highway 68, 0.5 mi (0.8 km) west of Glencoe. Datum of gage is 624.39 ft (190.314 m).	23.8	5.55	1961-79 (discontinued)	03-04-79	1.97
05535200	North Branch Chicago River at Glenview, IL	SE¼SE¼ sec.36, T.42 N., R.12 E., Cook County, at bridge on Glenview Road at Glenview. Datum of gage is 615.79 ft (187.693 m).	60.5	21.20	1960-79 (discontinued)	03-04-79	3.09

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Annual maximum Date	Annual maximum Gage height (feet)
		Illinois River basin--Continued					
05535700	West Fork of North Branch Chicago River at Glenview, IL	NE¼SW¼ sec.26, T.42 N., R.12 E., Cook County, at bridge on Chestnut Avenue in Glenview. Datum of gage is 620.60 ft (189.159 m).	21.6	3.54	1960-79 (discontinued)	03-04-79	3.66
05536178	Plum Creek near Dyer, IN	SE¼SW¼ sec.32, T.35 N., R.15 E., Cook County, at bridge on Steger Road, 1.8 mi (2.9 km) southwest of Dyer. Datum of gage is 635.87 ft (193.813 m).	34.8	8.39	1966-79 (discontinued)	03-04-79	4.98
05536182	Plum Creek at Dyer, IN	NW¼ sec.13, T.35 N., R.10 E., Lake County, Ind., at bridge on Hart Street at Dyer. Datum of gage is 627.18 ft (191.164 m). Prior to Apr. 19, 1973, at datum 3.20 ft (0.98 m) lower.	36.5	5.79	1966-79 (discontinued)	03-04-79	2.52
05536204	Thorn Creek at Chicago Heights, IL	Near center of sec.20, T.35 N., R.14 E., Cook County, at bridge on U.S. Highway 30 at Chicago Heights. Datum of gage is 642.61 ft (195.868 m). Prior to Apr. 19, 1973, at datum 1.50 ft (0.46 m) higher.	10.0	11.82	1962-79 (discontinued)	03-04-79	.33
05536207	Thorn Creek tributary at Chicago Heights, IL	SW¼NE¼ sec.19, T.35 N., R.14 E., Cook County, at bridge on U.S. Highway 30 in Chicago Heights. Datum of gage is 660.96 ft (201.461 m). Prior to Apr. 19, 1973, at datum 0.83 ft (0.25 m) higher.	3.87	1.51	1962-79 (discontinued)	08-18-79	2.50
05536226	Deer Creek near Steger, IL	SE¼SW¼ sec.34, T.35 N., R.14 E., Cook County, at bridge on Steger Road, 1.6 mi (2.6 km) east of Steger. Datum of gage is 664.63 ft (202.579 m).	16.0	7.86	1966-79 (discontinued)	03-04-79	4.26
05536230	Deer Creek near Sauk Village, IL	NE¼SE¼ sec.27, T.35 N., R.14 E., Cook County, at bridge on Cottage Grove Avenue, 1.5 mi (2.4 km) west of Sauk Village. Datum of gage is 645.26 ft (196.675 m).	17.5	5.85	1966-79 (discontinued)	03-04-79	5.47
05536242	Butterfield Creek at Olympia Fields, IL	SW¼NW¼ sec.23, T.35 N., R.13 E., Cook County, at culvert on U.S. Highway 54 at southwest edge of Olympia Fields. Datum of gage is 680.68 ft (207.471 m).	9.44	8.12	1961-79 (discontinued)	-	(a)
05536250	Butterfield Creek near Flossmoor, IL	SE¼SE¼ sec.12, T.35 N., R.13 E., Cook County, at culvert on Vollmer Road, 0.5 mi (0.8 km) south of Flossmoor. Datum of gage is 649.14 ft (197.858 m).	19.2	4.62	1961-79 (discontinued)	03-04-79	.75
05536295	Calumet Union Drainage Canal at Markham, IL	NE¼NW¼ sec.24, T.36 N., R.13 E., Cook County, at downstream end of underground conduit along south side of U.S. Highway 6, about 2,400 ft (732 m) downstream (east) from Kedzie Avenue. Datum of gage is 605.77 ft (184.639 m). Prior to March 1964, 2,200 ft (671 m) upstream at datum 5.02 ft (1.53 m) higher, and at datum 0.45 ft (0.14 m) lower March 1964 to November 1971.	2.15	4.17	1962-79 (discontinued)	03-04-79	4.36
05536300	Calumet Union Drainage Canal tributary near Hazel Crest, IL	NW¼SW¼ sec.25,. T.36 N., R.13 E., Cook County, at culvert on Kedzie Avenue at west edge of Hazel Crest. Datum of gage is 632.05 ft (192.649 m).	3.21	2.28	1961-79 (discontinued)	-	(b)

a Gage destroyed.
b Gage removed because of bridge construction.

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Annual maximum Date	Annual maximum Gage height (feet)
		Illinois River basin--Continued					
05536305	Cherry Creek at Hazel Crest, IL	SW¼NW¼ sec.30, T.36 N., R.14 E., Cook County, at culvert on 170th Street in Hazel Crest. Datum of gage is 614.21 ft (187.211 m). Prior to Mar. 13, 1963, at datum 1.46 ft (0.45 m) higher.	5.09	1.31	1962-79 (discontinued)	03-04-79	2.18
05536315	Calumet Union Drainage Canal at South Holland, IL	NE¼NW¼ sec.21, T.36 N., R.14 E., Cook County, at bridge on Vincennes Avenue at South Holland, 0.6 mi (1.0 km) southeast of Harvey. Datum of gage is 593.38 ft (180.862 m).	17.1	1.03	1961-79 (discontinued)	03-04-79	4.16
05536330	Midlothian Creek at Tinley Park, IL	NE¼SW¼ sec.30, T.36 N., R.13 E., Cook County, at culvert on 171st Street at Tinley Park. Datum of gage is 687.32 ft (209.495 m).	7.37	9.53	1961-79 (discontinued)	03-04-79	.64
05536345	Midlothian Creek tributary at Midlothian, IL	SE¼NW¼ sec.10, T.36 N., R.13 E., Cook County, at bridge on 147th Street, 0.3 mi (0.5 km) east of State Highway 50 at Midlothian. Datum of gage is 623.24 ft (189.963 m).	2.86	1.89	1962-79 (discontinued)	03-04-79	3.08
05536350	Midlothian Creek at Robbins, IL	SE¼NE¼ sec.2, T.36 N., R.13 E., Cook County, at culvert on 139th Street in Robbins. Datum of gage is 595.99 ft (181.658 m).	18.3	1.83	1962-79 (discontinued)	03-04-79	3.05
05536355	Midlothian Creek at Blue Island, IL	SE¼NE¼ sec.1, T.36 N., R.13 E., Cook County, at bridge on Western Avenue at south edge of Blue Island. Datum of gage is 589.21 ft (179.591 m).	19.8	.59	1962-79 (discontinued)	03-04-79	.99
05536440	Tinley Creek near Orland Park, IL	SE¼SW¼ sec.11, T.36 N., R.12 E., Cook County, at culvert on 151st Street at south edge of Silver Lake Country Club, 2.0 mi (3.2 km) southeast of Orland Park. Datum of gage is 668.86 ft (203.869 m). Prior to May 19, 1973, at datum 1.00 ft (0.30 m) higher.	3.36	7.13	1962-79 (discontinued)	03-04-79	.94
05536480	Tinley Creek tributary near Oak Forest, IL	SW¼NW¼ sec.8, T.36 N., R.13 E., Cook County, at bridge on 147th Street, 2.2 mi (3.5 km) northwest of Oak Forest. Datum of gage is 655.09 ft (199.671 m).	1.70	1.05	1962-79 (discontinued)	03-04-79	3.14
05536580	Stony Creek (West) near Worth, IL	NE¼NW¼ sec.23, T.37 N., R.12 E., Cook County, at bridge on 111th Street, 1.7 mi (2.7 km) west of Worth. Datum of gage is 580.44 ft (176.918 m).	19.1	.62	1962-79 (discontinued)	06-30-79	1.70
05536590	Lucas ditch at Palos Hills, IL	NW¼SW¼ sec.14, T.37 N., R.12 E., Cook County, at culvert on 107th Street, 0.6 mi (1.0 km) west of Palos Hills and about 2 mi (3 km) north of Palos Park. Datum of gage is 585.35 ft (178.415 m). Prior to May 15, 1973, at datum 1.50 ft (0.46 m) higher.	5.31	.65	1961-79 (discontinued)	03-04-79	2.44
05536620	Mill Creek near Palos Park, IL	NW¼SE¼ sec.34, T.37 N., R.12 E., Cook County, at culvert on 131st Street, 1.0 mi (1.6 km) south of Palos Park. Datum of gage is 665.66 ft (202.893 m).	6.39	3.98	1962-79 (discontinued)	03-04-79	3.40

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Annual maximum Date	Annual maximum Gage height (feet)
		Illinois River basin--Continued					
		Hydrologic Unit 07120004					
05537300	Long Run near Orland Park, IL	NE¼SE¼ sec.1, T.36 N., R.11 E., Will County, at culvert on Will-Cook County Line Road near junction with 139th Street, 1.5 mi (2.4 km) northwest of Orland Park. Datum of gage is 681.62 ft (207.758 m).	3.31	11.38	1962-79 (discontinued)	03-04-79	4.50
05538160	Union Drainage ditch No. 1 near Tinley Park, IL	SE¼NW¼ sec.6, T.35 N., R.13 E., Cook County, at culvert on Oak Park Avenue at northeast corner of Prosperi Airport, 1.4 mi (2.3 km) south of Tinley Park. Datum of gage is 687.98 ft (209.696 m).	5.15	.99	1962-79 (discontinued)	03-04-79	4.85
05538180	Flossmoor Road Drainage ditch near Tinley Park, IL	NE¼NE¼ sec.7, T.35 N., R.13 E., Cook County, at culvert on Ridgeland Avenue, 2.5 mi (4.0 km) south of Tinley Park. Datum of gage is 688.05 ft (209.718 m).	2.39	2.01	1962-79 (discontinued)	03-04-79	5.12
05538440	Spring Creek near Orland Park, IL	NE¼NE¼ sec.19, T.36 N., R.12 E., Cook County, at bridge on 159th Street (State Highway 7), 2.7 mi (4.3 km) southwest of Orland Park. Datum of gage is 688.05 ft (209.718 m).	1.59	15.48	1961-79 (discontinued)	03-04-79	1.97
		Hydrologic Unit 07120006					
05549870	Spring Creek near Carpentersville, IL	NE¼ sec.17, T.42 N., R.9 E., Cook County, at bridge on State Highway 62, 4.0 mi (6.4 km) northeast of Carpentersville. Datum of gage is 781.38 ft (238.165 m).	8.28	7.97	1961-79 (discontinued)	08-10-79	2.29
05550350	Poplar Creek near Barrington, IL	NW¼ sec.25, T.42 N., R.9 E., Cook County, at culvert on State Highway 62, 0.2 mi (0.3 km) east of Barrington Road and 4.0 mi (6.4 km) south of Barrington. Datum of gage is 838.33 ft (255.523 m).	3.30	14.84	1961-79 (discontinued)	03-19-79	1.84
05550430	East Branch Poplar Creek near Palatine, IL	SW¼SE¼ sec.31, T.42 N., R.10 E., Cook County, at culvert on Central Road, 400 ft (122 m) north of Northwest Tollway, 0.5 mi (0.8 km) east of Freeman Road, and about 4.5 mi (7.2 km) southwest of Palatine. Datum of gage is 792.00 ft (241.402 m).	2.63	2.70	1961-79 (discontinued)	03-19-79	2.21
05550450	Poplar Creek near Ontarioville, IL	NE¼NW¼ sec.13, T.41 N., R.9 E., Cook County, at culvert on State Highway 58, 0.6 mi (1.0 km) west of Barrington Road and about 4 mi (6 km) north of Ontarioville. Datum of gage is 775.80 ft (236.464 m).	16.7	10.08	1961-79 (discontinued)	3-19-79	3.44
05550490	Poplar Creek near Elgin, IL	SE¼ sec.17, T.41 N., R.9 E., Cook County, at bridge on Rohrson Road, 0.2 mi (0.3 km) north of State Highway 19 and about 3 mi (5 km) east of Elgin. Datum of gage is 751.38 ft (229.021 m).	33.8	4.48	1961-79 (discontinued)	03-19-79	3.03

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

Water-quality partial-record stations are particular sites where chemical-quality, biological and/or sediment data are collected systematically over a period of years for use in hydrologic analyses. The following stations are part of the coal hydrology program.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
ILLINOIS RIVER BASIN											
05563000 - KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00 LONG 089 48 00)											
JUL , 1979											
16...	1415	80010	80010	16	705	8.0	26.5	28.5	.0	.0	260
AUG											
03...	0810	80010	80010	8.8	685	8.3	19.0	22.0	.0	.0	270
30...	1130	80010	80010	3.9	720	7.9	33.5	24.0	.0	.0	300
05563500 - KICKAPOO CREEK AT PEORIA, IL (LAT 40 40 52 LONG 089 39 19)											
JUL , 1979											
19...	0930	80010	80010	25	842	8.4	27.5	22.5	.0	.0	260
AUG											
03...	1030	80010	80010	36	910	8.5	24.5	26.0	.0	.0	260
30...	1315	80010	80010	14	925	8.2	28.0	25.0	.0	.0	260
05568450 - LITTLE LAMARSH CREEK AT MAPLETON, IL (LAT 40 33 48 LONG 089 44 36)											
JUL , 1979											
18...	1400	80010	80010	.18	2250	7.9	26.0	26.0	.0	.0	320
AUG											
03...	1100	80010	80010	.41	1050	7.9	25.5	24.0	.0	.0	290
05568675 - BUCKHEART CREEK NEAR LIVERPOOL, IL (LAT 40 25 13 LONG 090 00 30)											
JUL , 1979											
17...	1430	80010	80010	2.5	1960	8.2	26.0	25.0	.0	.0	230
AUG											
02...	0945	80010	80010	7.6	1220	8.1	25.0	20.0	.0	.0	230
05568765 - EAST FORK SPOON RIVER AT MODENA, IL (LAT 41 08 53 LONG 089 45 30)											
JUL , 1979											
17...	1240	80010	80010	50	790	8.1	20.0	21.0	.0	.0	250
AUG											
02...	1315	80010	80010	10	790	8.5	28.0	23.0	.0	.0	280
28...	1700	80010	80010	25	710	7.8	27.5	24.0	.0	.0	270
05568772 - JACK CREEK AT MODENA, IL (LAT 41 08 05 LONG 089 46 40)											
JUL , 1979											
17...	1105	80010	80010	6.7	710	8.1	23.0	19.0	.0	.0	270
AUG											
02...	1210	80010	80010	4.1	790	8.5	30.0	23.0	.0	.0	270
28...	1620	80010	80010	2.4	710	8.0	29.0	26.0	.0	.0	300
05568778 - SPOON RIVER NEAR STARK, IL (LAT 41 01 05 LONG 089 46 12)											
JUL , 1979											
17...	1545	80010	80010	118	840	8.2	21.0	23.0	.0	.0	260
AUG											
02...	1610	80010	80010	38	930	8.7	27.0	27.0	.0	.0	230
30...	1000	80010	80010	63	830	8.2	25.0	23.5	.0	.0	290

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
ILLINOIS RIVER BASIN--Continued											
05563000 - KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00 LONG 089 48 00)											
JUL , 1979											
16...	--	69	--	--	--	--	--	1100	1100	30	--
AUG											
03...	2.6	70	--	--	--	--	--	820	790	30	--
30...	7.4	61	0	<10	<10	<10	<10	960	940	20	3900
05563500 - KICKAPOO CREEK AT PEORIA, IL (LAT 40 40 52 LONG 089 39 19)											
JUL , 1979											
19...	--	2000	--	--	--	--	--	1900	1800	60	--
AUG											
03...	1.6	190	--	--	--	--	--	2900	2900	40	--
30...	3.2	200	0	<10	<10	<10	<10	2000	2000	20	4300
05568450 - LITTLE LAMARSH CREEK AT MAPLETON, IL (LAT 40 33 48 LONG 089 44 36)											
JUL , 1979											
18...	--	1000	--	--	--	--	--	520	450	70	--
AUG											
03...	7.1	670	--	--	--	--	--	380	320	60	--
05568675 - BUCKHEART CREEK NEAR LIVERPOOL, IL (LAT 40 25 13 LONG 090 00 30)											
JUL , 1979											
17...	--	910	--	--	--	--	--	370	300	70	--
AUG											
02...	3.6	700	0	<10	<10	<10	<10	1500	1500	50	15000
05568765 - EAST FORK SPOON RIVER AT MODENA, IL (LAT 41 08 53 LONG 089 45 30)											
JUL , 1979											
17...	--	57	--	--	--	--	--	2000	2000	20	--
AUG											
02...	1.7	47	--	--	--	--	--	1100	1100	10	--
28...	8.4	45	0	<10	<10	10	<10	1200	1200	10	1900
05568772 - JACK CREEK AT MODENA, IL (LAT 41 08 05 LONG 089 46 40)											
JUL , 1979											
17...	--	60	--	--	--	--	--	3000	3000	20	--
AUG											
02...	1.7	55	--	--	--	--	--	1400	1400	20	--
28...	5.9	64	0	<10	<10	20	<10	1500	1500	10	14000
05568778 - SPOON RIVER NEAR STARK, IL (LAT 41 01 05 LONG 089 46 12)											
JUL , 1979											
17...	--	78	--	--	--	--	--	2900	2900	20	--
AUG											
02...	.9	130	--	--	--	--	--	910	880	30	--
30...	3.6	70	0	<10	<10	10	<10	320	290	30	3300

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
ILLINOIS RIVER BASIN--Continued											
05563000 - KICKAPOO CREEK NEAR KICKAPOO, IL (LAT 40 48 00 LONG 089 48 00)											
JUL , 1979											
16...	--	70	30	40	--	--	--	--	57	2.5	73
AUG											
03...	--	180	70	110	--	--	--	--	61	1.4	64
30...	10	200	60	140	160	.00	0	10	51	.54	72
05563500 - KICKAPOO CREEK AT PEORIA, IL (LAT 40 40 52 LONG 089 39 19)											
JUL , 1979											
19...	--	120	80	40	--	--	--	--	127	8.6	83
AUG											
03...	--	160	130	30	--	--	--	--	165	16	83
30...	10	140	100	40	270	.00	0	20	131	5.0	88
05568450 - LITTLE LAMARSH CREEK AT MAPLETON, IL (LAT 40 33 48 LONG 089 44 36)											
JUL , 1979											
18...	--	330	20	310	--	--	--	--	79	.04	32
AUG											
03...	--	200	20	180	--	--	--	--	19	.02	29
05568675 - BUCKHEART CREEK NEAR LIVERPOOL, IL (LAT 40 25 13 LONG 090 00 30)											
JUL , 1979											
17...	--	160	50	110	--	--	--	--	36	.24	43
AUG											
02...	20	300	100	200	990	.00	0	50	97	2.0	88
05568765 - EAST FORK SPOON RIVER AT MODENA, IL (LAT 41 08 53 LONG 089 45 30)											
JUL , 1979											
17...	--	90	60	30	--	--	--	--	121	16	84
AUG											
02...	--	100	50	50	--	--	--	--	63	1.7	79
28...	10	100	50	50	390	.00	0	10	65	4.4	73
05568772 - JACK CREEK AT MODENA, IL (LAT 41 08 05 LONG 089 46 40)											
JUL , 1979											
17...	--	180	100	80	--	--	--	--	230	4.2	88
AUG											
02...	--	80	40	40	--	--	--	--	88	.98	92
28...	20	110	60	50	1400	.00	0	40	62	.40	83
05568778 - SPOON RIVER NEAR STARK, IL (LAT 41 01 05 LONG 089 46 12)											
JUL , 1979											
17...	--	120	90	30	--	--	--	--	133	42	86
AUG											
02...	--	100	40	60	--	--	--	--	63	6.5	77
30...	10	60	10	50	280	.00	0	20	38	6.5	26

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
ILLINOIS RIVER BASIN--Continued											
05568855 - WALNUT CREEK NEAR VICTORIA, IL (LAT 41 04 14 LONG 090 02 23)											
JUL , 1979											
17...	0850	80010	80010	26	710	7.5	20.0	19.0	.0	.0	250
AUG											
01...	1145	80010	80010	13	650	8.6	28.0	23.0	.0	.0	240
30...	0830	80010	80010	4.2	760	8.0	26.0	22.0	.0	.0	270
05568895 - SNAKEDEN HOLLOW NEAR DAHINDA, IL (LAT 40 57 34 LONG 090 04 15)											
JUL , 1979											
16...	1750	80010	80010	4.0	1310	8.1	25.0	25.0	.0	.0	190
AUG											
01...	1000	80010	80010	1.9	1420	8.2	24.0	23.0	.0	.0	210
29...	1710	80010	80010	1.4	1390	8.0	29.0	25.0	.0	.0	230
05568910 - SUGAR CREEK AT DAHINDA, IL (LAT 40 55 40 LONG 090 07 00)											
JUL , 1979											
16...	1445	80010	80010	.38	590	8.1	28.5	27.0	.0	.0	190
AUG											
01...	0835	80010	80010	.61	560	8.0	18.5	22.5	.0	.0	180
29...	1615	80010	80010	.35	675	8.1	30.5	27.0	.0	.0	190
05568935 - HICKORY CREEK NEAR DOUGLAS, IL (LAT 40 46 36 LONG 090 06 03)											
JUL , 1979											
17...	0915	80010	80010	2.0	2000	7.9	24.0	22.0	.0	.0	260
AUG											
03...	0900	80010	80010	2.3	1610	8.1	23.5	22.5	.0	.0	240
05569455 - LITTLERS CREEK NEAR MAQUON, IL (LAT 40 44 08 LONG 090 12 00)											
JUL , 1979											
17...	1015	80010	80010	3.0	1680	8.2	27.0	24.0	.0	.0	230
AUG											
03...	0730	80010	80010	7.6	1380	8.2	18.5	22.5	.0	.0	230
05569920 - COAL CREEK NEAR FAIRVIEW, IL (LAT 40 39 33 LONG 090 14 00)											
JUL , 1979											
17...	1115	80010	80010	2.2	1280	8.2	25.0	24.0	.0	.0	220
AUG											
02...	1500	80010	80010	4.6	1030	8.2	28.0	25.5	.0	.0	220
05569953 - PUT CREEK NEAR CANTON, IL (LAT 40 34 17 LONG 090 06 51)											
JUL , 1979											
17...	1400	80010	80010	.26	585	8.4	25.0	27.0	.0	.0	230
AUG											
02...	1300	80010	80010	1.2	470	8.8	28.5	25.5	.0	.0	160
05569968 - TURKEY CREEK NR FIATT,IL (LAT 40 35 22 LONG 090 13 50)											
JUL , 1979											
17...	1200	80010	80010	.42	548	8.2	25.0	26.0	.0	.0	240
AUG											
02...	1345	80010	80010	1.3	534	8.5	28.5	27.5	.0	.0	230

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
ILLINOIS RIVER BASIN--Continued											
05568855 - WALNUT CREEK NEAR VICTORIA, IL (LAT 41 04 14 LONG 090 02 23)											
JUL , 1979											
17...	--	67	--	--	--	--	--	2400	2400	20	--
AUG											
01...	1.2	51	--	--	--	--	--	1200	1200	30	--
30...	5.3	65	0	<10	<10	10	<10	3000	3000	10	6300
05568895 - SNAKEDEN HOLLOW NEAR DAHINDA, IL (LAT 40 57 34 LONG 090 04 15)											
JUL , 1979											
16...	--	520	--	--	--	--	--	790	750	40	--
AUG											
01...	2.6	560	--	--	--	--	--	740	690	50	--
29...	4.5	530	0	<10	<10	10	<10	730	700	30	10000
05568910 - SUGAR CREEK AT DAHINDA, IL (LAT 40 55 40 LONG 090 07 00)											
JUL , 1979											
16...	--	110	--	--	--	--	--	1600	1600	20	--
AUG											
01...	3.5	93	--	--	--	--	--	2500	2500	40	--
29...	2.9	150	0	<10	<10	<10	10	1500	1500	30	9700
05568935 - HICKORY CREEK NEAR DOUGLAS, IL (LAT 40 46 36 LONG 090 06 03)											
JUL , 1979											
17...	--	980	--	--	--	--	--	1100	1000	70	--
AUG											
03...	3.7	730	0	<10	<10	10	<10	1400	1400	50	13000
05569455 - LITTLERS CREEK NEAR MAQUON, IL (LAT 40 44 08 LONG 090 12 00)											
JUL , 1979											
17...	--	730	--	--	--	--	--	420	350	70	--
AUG											
03...	2.8	560	0	<10	<10	10	<10	1000	950	50	21000
05569920 - COAL CREEK NEAR FAIRVIEW, IL (LAT 40 39 33 LONG 090 14 00)											
JUL , 1979											
17...	--	580	--	--	--	--	--	770	710	60	--
AUG											
02...	2.7	520	0	<10	<10	10	<10	480	430	50	20000
05569953 - PUT CREEK NEAR CANTON, IL (LAT 40 34 17 LONG 090 06 51)											
JUL , 1979											
17...	--	40	--	--	--	--	--	1300	1300	50	--
AUG											
02...	.5	95	0	<10	<10	<10	<10	1600	1600	20	11000
05569968 - TURKEY CREEK NR FIATT,IL (LAT 40 35 22 LONG 090 13 50)											
JUL , 1979											
17...	--	41	--	--	--	--	--	910	880	30	--
AUG											
02...	1.4	47	0	<10	<10	<10	<10	600	550	50	7100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
ILLINOIS RIVER BASIN--Continued											
05568855 - WALNUT CREEK NEAR VICTORIA, IL (LAT 41 04 14 LONG 090 02 23)											
JUL , 1979											
17...	--	120	80	40	--	--	--	--	128	9.0	80
AUG											
01...	--	170	70	100	--	--	--	--	54	1.9	75
30...	10	400	130	270	620	.00	0	20	127	1.4	84
05568895 - SNAKEDEN HOLLOW NEAR DAHINDA, IL (LAT 40 57 34 LONG 090 04 15)											
JUL , 1979											
16...	--	100	40	60	--	--	--	--	36	.39	88
AUG											
01...	--	150	60	90	--	--	--	--	61	.31	70
29...	10	170	60	110	570	.00	0	40	37	.14	81
05568910 - SUGAR CREEK AT DAHINDA, IL (LAT 40 55 40 LONG 090 07 00)											
JUL , 1979											
16...	--	210	110	100	--	--	--	--	84	.09	67
AUG											
01...	--	310	140	170	--	--	--	--	86	.14	96
29...	20	300	110	190	600	.00	1	40	41	.04	98
05568935 - HICKORY CREEK NEAR DOUGLAS, IL (LAT 40 46 36 LONG 090 06 03)											
JUL , 1979											
17...	--	390	90	300	--	--	--	--	92	.50	62
AUG											
03...	190	300	150	150	460	.00	0	30	72	.45	85
05569455 - LITTLERS CREEK NEAR MAQUON, IL (LAT 40 44 08 LONG 090 12 00)											
JUL , 1979											
17...	--	390	20	370	--	--	--	--	40	.32	72
AUG											
03...	20	330	50	280	1000	.00	0	50	51	1.0	73
05569920 - COAL CREEK NEAR FAIRVIEW, IL (LAT 40 39 33 LONG 090 14 00)											
JUL , 1979											
17...	--	200	40	160	--	--	--	--	63	.37	70
AUG											
02...	10	170	30	140	1100	.00	0	60	21	.26	65
05569953 - PUT CREEK NEAR CANTON, IL (LAT 40 34 17 LONG 090 06 51)											
JUL , 1979											
17...	--	200	60	140	--	--	--	--	49	.03	84
AUG											
02...	10	130	70	60	940	.00	0	30	52	.17	96
05569968 - TURKEY CREEK NR FIATT, IL (LAT 40 35 22 LONG 090 13 50)											
JUL , 1979											
17...	--	240	60	180	--	--	--	--	48	.05	63
AUG											
02...	<10	160	90	70	310	.00	0	10	38	.13	95

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKALINITY (MG/L AS CACO3) (00410)
				ILLINOIS RIVER BASIN--Continued							
				05570570 - OTTER CREEK NEAR VERMONT, IL (LAT 40 17 29 LONG 090 23 38)							
JUL , 1979											
16...	1530	80010	80010	.10	1960	8.1	28.0	26.0	--	--	--
AUG											
02...	0800	80010	80010	.05	935	8.2	25.5	20.5	.0	.0	220
				05575050 - BEAR CREEK NEAR PALMER, IL (LAT 39 28 50 LONG 089 25 30)							
JUL , 1979											
05...	1400	80010	80010	2.1	528	7.5	23.0	21.0	.0	.0	180
30...	1100	80010	80010	11	345	7.6	29.0	26.5	.0	.0	99
				05575830 - BRUSH CREEK NEAR DIVERNON, IL (LAT 39 35 50 LONG 089 37 48)							
JUL , 1979											
06...	1330	80010	80010	1.4	498	8.4	23.0	21.0	.0	.0	130
AUG											
01...	1300	80010	80010	272	160	7.3	21.0	21.0	.0	.0	39
				05576000 - SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL (LAT 39 44 32 LONG 089 34 02)							
JUL , 1979											
06...	0930	80010	80010	41	728	8.3	21.0	21.5	.0	.0	190
AUG											
01...	1430	80010	80010	550	245	7.5	22.0	23.0	.0	.0	67
				05576190 - SUGAR CREEK NEAR GLENARM, IL (LAT 39 36 49 LONG 089 41 05)							
JUL , 1979											
06...	1200	80010	80010	--	536	8.1	23.0	21.5	.0	.0	130
AUG											
01...	1100	80010	80010	210	100	7.3	20.5	21.5	.0	.0	21
				05577500 - SPRING CREEK AT SPRINGFIELD, IL (LAT 39 48 57 LONG 089 41 57)							
JUL , 1979											
06...	0800	80010	80010	12	532	7.7	22.0	20.5	.0	.0	220
AUG											
01...	1615	80010	80010	518	325	7.6	22.5	22.0	.0	.0	110
				05586630 - MACOUPIN CREEK NEAR STANDARD CITY, IL (LAT 39 20 51 LONG 089 44 08)							
JUL , 1979											
05...	1230	80010	80010	.96	495	7.2	25.0	22.0	.0	.0	160
AUG											
01...	0845	80010	80010	54	220	7.4	19.5	21.5	.0	.0	55
				05586645 - MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16 LONG 089 47 15)							
JUN , 1979											
18...	1630	80010	80010	--	540	7.4	25.0	25.0	.0	.0	200
				05586860 - BEAR CREEK AT CHESTERFIELD, IL (LAT 39 16 07 LONG 090 04 11)							
JUN , 1979											
19...	0830	80010	80010	.06	890	7.8	25.0	24.0	.0	.0	290
JUL											
31...	1445	80010	80010	1.9	285	7.5	24.0	24.5	.0	.0	99

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
ILLINOIS RIVER BASIN--Continued											
05570570 - OTTER CREEK NEAR VERMONT, IL (LAT 40 17 29 LONG 090 23 38)											
JUL , 1979											
16...	--	--	--	--	--	--	--	--	--	--	--
AUG											
02...	2.7	290	0	<10	20	20	20	540	440	100	26000
05575050 - BEAR CREEK NEAR PALMER, IL (LAT 39 28 50 LONG 089 25 30)											
JUL , 1979											
05...	--	45	--	--	--	--	780	840	--	60	--
30...	4.9	47	1	<10	<10	<10	<10	2600	2600	50	16000
05575830 - BRUSH CREEK NEAR DIVERNON, IL (LAT 39 35 50 LONG 089 37 48)											
JUL , 1979											
06...	--	--	--	--	--	--	--	460	400	60	--
AUG											
01...	3.8	21	0	<10	<10	<10	<10	11000	11000	200	12000
05576000 - SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL (LAT 39 44 32 LONG 089 34 02)											
JUL , 1979											
06...	--	68	--	--	--	--	--	2900	2900	50	--
AUG											
01...	--	26	2	<10	10	<10	10	9300	9300	50	15000
05576190 - SUGAR CREEK NEAR GLENARM, IL (LAT 39 36 49 LONG 089 41 05)											
JUL , 1979											
06...	--	67	--	--	--	--	--	1400	1400	30	--
AUG											
01...	2.1	11	0	<10	<10	<10	<10	16000	16000	120	8300
05577500 - SPRING CREEK AT SPRINGFIELD, IL (LAT 39 48 57 LONG 089 41 57)											
JUL , 1979											
06...	--	50	--	--	--	--	--	2100	2100	50	--
AUG											
01...	5.4	29	2	<10	<10	10	20	8700	8600	130	19000
05586630 - MACOUPIN CREEK NEAR STANDARD CITY, IL (LAT 39 20 51 LONG 089 44 08)											
JUL , 1979											
05...	--	66	--	--	--	--	--	930	900	30	--
AUG											
01...	4.3	24	0	<10	10	20	<10	11000	11000	140	20000
05586645 - MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16 LONG 089 47 15)											
JUN , 1979											
18...	--	56	--	--	--	--	--	360	330	30	--
05586860 - BEAR CREEK AT CHESTERFIELD, IL (LAT 39 16 07 LONG 090 04 11)											
JUN , 1979											
19...	--	130	--	--	--	--	--	1700	1700	30	--
JUL											
31...	6.1	20	1	10	<10	<10	<10	6000	5900	100	6700

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G) (01148)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
ILLINOIS RIVER BASIN--Continued											
05570570 - OTTER CREEK NEAR VERMONT, IL (LAT 40 17 29 LONG 090 23 38)											
JUL , 1979											
16...	--	--	--	--	--	--	--	--	60	.02	80
AUG											
02...	30	200	50	150	910	.00	0	70	34	.00	85
05575050 - BEAR CREEK NEAR PALMER, IL (LAT 39 28 50 LONG 089 25 30)											
JUL , 1979											
05...	--	220	0	220	--	--	--	--	23	.13	99
30...	10	190	70	120	830	.00	0	40	74	2.2	99
05575830 - BRUSH CREEK NEAR DIVERNON, IL (LAT 39 35 50 LONG 089 37 48)											
JUL , 1979											
06...	--	110	30	80	--	--	--	--	17	.07	92
AUG											
01...	20	540	350	190	910	.00	0	20	428	314	99
05576000 - SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL (LAT 39 44 32 LONG 089 34 02)											
JUL , 1979											
06...	--	320	160	160	--	--	--	--	90	10	100
AUG											
01...	20	470	420	50	540	.00	0	50	496	737	100
05576190 - SUGAR CREEK NEAR GLENARM, IL (LAT 39 36 49 LONG 089 41 05)											
JUL , 1979											
06...	--	170	40	130	--	--	--	--	46	--	98
AUG											
01...	10	860	820	40	380	.00	0	230	978	555	100
05577500 - SPRING CREEK AT SPRINGFIELD, IL (LAT 39 48 57 LONG 089 41 57)											
JUL , 1979											
06...	--	230	90	140	--	--	--	--	69	2.3	100
AUG											
01...	70	350	320	30	510	.00	0	100	265	371	98
05586630 - MACOUPIN CREEK NEAR STANDARD CITY, IL (LAT 39 20 51 LONG 089 44 08)											
JUL , 1979											
05...	--	650	40	610	--	--	--	--	27	.07	95
AUG											
01...	160	610	550	60	2100	.00	0	30	543	80	100
05586645 - MACOUPIN CREEK NEAR CARLINVILLE, IL (LAT 39 18 16 LONG 089 47 15)											
JUN , 1979											
18...	--	780	100	680	--	--	--	--	10	--	93
05586860 - BEAR CREEK AT CHESTERFIELD, IL (LAT 39 16 07 LONG 090 04 11)											
JUN , 1979											
19...	--	1500	100	1400	--	--	--	--	74	.01	96
JUL											
31...	<10	370	220	150	360	.00	0	20	168	.86	100

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) (00095)	PH (UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	ACIDITY TOTAL HEATED (MG/L AS H) (71825)	ACIDITY (MG/L AS CACO3) (00435)	ALKA-LINITY (MG/L AS CACO3) (00410)
ILLINOIS RIVER BASIN--Continued											
05586890 - HODGES CREEK NEAR ROCKBRIDGE, IL (LAT 39 16 10 LONG 090 10 11)											
JUN , 1979											
19...	0930	80010	80010	6.1	565	7.7	--	25.0	.0	.0	220
JUL											
31...	1330	80010	80010	20	210	7.6	24.0	24.5	.0	.0	71

The following stations are also part of the coal hydrology program. They are published in the main body of the report.

05542000 Mazon River near Coal City
05555300 Vermilion River near Leonore
05568800 Indian Creek near Wyoming
05570360 Evelyn Branch near Bryant
05570370 Big Creek near Bryant

05570380 Slug Run near Bryant
05586690 Macoupin Creek near Macoupin

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS) (01003)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD) (01028)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01029)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO) (01038)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE) (01170)
ILLINOIS RIVER BASIN--Continued											
05586890 - HODGES CREEK NEAR ROCKBRIDGE, IL (LAT 39 16 10 LONG 090 10 11)											
JUN , 1979											
19...	--	60	--	--	--	--	--	1200	1200	40	--
JUL											
31...	3.5	17	2	<10	30	20	30	12000	12000	100	35000

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB) (01052)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G) (01053)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG) (71921)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G) (01148)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN) (01093)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
ILLINOIS RIVER BASIN--Continued											
05586890 - HODGES CREEK NEAR ROCKBRIDGE, IL (LAT 39 16 10 LONG 090 10 11)											
JUN , 1979											
19...	--	330	110	220	--	--	--	--	46	.76	92
JUL											
31...	30	490	420	70	810	.00	0	90	335	18	100

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (COOE NUMBER) (00028)	C.O.D. TOTAL IN BOTTOM MATERIAL (MG/KG) (00339)	SOLIDS, VOLATILE IN BOTTOM MATERIAL (MG/KG) (00496)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N) (00633)	NITROGEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N) (00611)	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N) (00626)	NITROGEN,TOT IN BOTTOM MATERIAL (MG/KG AS N) (00603)	PHOSPHORUS, TOTAL IN BOT. MAT. (MG/KG AS P) (00668)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA) (01008)
ILLINOIS RIVER BASIN												
05539450 - DES PLAINES RIVER AB CEDAR CR NR MILLSDALE, IL (LAT 41 28 02 LONG 088 09 49)												
APR , 1979												
24...	0930	80010	80010	240000	112000	--	140	11000	--	4700	2	280
24...	0945	80010	80010	340000	143000	--	150	17000	--	5100	1	240
24...	1000	80010	80010	77000	74200	--	30	4000	--	5900	0	90
05539505 - DES PLAINES RIV AB JACKSON CR NR MILLSDALE, IL (LAT 41 26 17 LONG 088 10 15)												
APR , 1979												
24...	1030	80010	80010	65000	36600	--	24	6100	--	8800	0	130
24...	1100	80010	80010	35000	24500	--	6.2	1900	--	3600	0	40
24...	1130	80010	80010	22000	36600	--	4.8	1100	--	6000	0	30
05541200 - DES PLAINES RIVER BL GRANT CR NR CHANNAHON, IL (LAT 41 23 01 LONG 088 14 25)												
APR , 1979												
24...	1300	80010	80010	250000	117000	.9	160	9100	9100	9700	2	290
24...	1330	80010	80010	130000	84600	--	78	7700	--	6700	1	210
24...	1400	80010	80010	180000	112000	--	150	15000	--	5400	0	260
24...	1430	80010	80010	120000	91200	--	200	7400	--	6500	2	190
05542800 - ILLINOIS RIVER NEAR STOCKDALE, IL (LAT 41 19 57 LONG 088 30 09)												
APR , 1979												
25...	1045	80010	80010	26000	40700	--	2.8	9600	--	390	1	70
25...	1100	80010	80010	15000	7230	--	.2	3000	--	410	0	10
25...	1115	80010	80010	15000	9130	--	.2	2200	--	580	0	10
05543010 - ILLINOIS RIVER AT SENECA, IL (LAT 41 18 00 LONG 088 37 03)												
APR , 1979												
25...	1130	80010	80010	16000	6390	--	.2	2000	--	170	0	10
25...	1145	80010	80010	9600	6380	--	.2	2500	--	210	0	10
25...	1200	80010	80010	17000	6700	--	.2	1900	--	1000	0	10
05543510 - MARSEILLES CANAL AT MARSEILLES, IL (LAT 41 19 18 LONG 088 42 39)												
APR , 1979												
25...	1315	80010	80010	22000	20900	--	1.1	5500	--	710	0	10
25...	1330	80010	80010	71000	56800	--	36	22000	--	1400	2	70
25...	1400	80010	80010	90000	63800	--	100	28000	--	750	1	80
25...	1430	80010	80010	68000	55500	--	3.1	22000	--	510	1	70

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) (01068)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	OIL AND GREASE, TOT. IN BOT MAT GRAVIMETRIC (MG/KG) (00557)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG) (39519)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39333)
ILLINOIS RIVER BASIN--Continued												
05539450 - DES PLAINES RIVER AB CEDAR CR NR MILLSDALE, IL (LAT 41 28 02 LONG 088 09 49)												
APR . 1979												
24...	20	160	300	38000	210	620	.00	190	1270	0	1300	.0
24...	20	150	210	30000	320	540	.00	160	940	0	240	--
24...	10	50	50	16000	90	300	.02	110	490	0	390	--
05539505 - DES PLAINES RIV AB JACKSON CR NR MILLSDALE, IL (LAT 41 26 17 LONG 088 10 15)												
APR . 1979												
24...	<10	60	60	19000	120	360	.00	90	600	100	1600	.0
24...	10	20	30	8200	40	210	.00	40	270	0	500	--
24...	10	20	20	8800	30	210	.00	50	2000	0	1000	--
05541200 - DES PLAINES RIVER BL GRANT CR NR CHANNAHON, IL (LAT 41 23 01 LONG 088 14 25)												
APR . 1979												
24...	30	210	290	39000	510	680	.07	160	1350	0	1600	.0
24...	20	130	170	33000	210	660	.06	140	980	0	1100	--
24...	30	180	260	35000	310	620	.09	150	1170	0	1300	--
24...	20	140	210	34000	220	580	.00	130	940	0	1300	--
05542800 - ILLINOIS RIVER NEAR STOCKDALE, IL (LAT 41 19 57 LONG 088 30 09)												
APR . 1979												
25...	10	10	20	20000	20	840	.03	20	90	0	38	--
25...	10	10	10	3300	10	110	.00	10	40	0	0	--
25...	<10	10	<10	4300	10	150	.00	10	50	0	23	.0
05543010 - ILLINOIS RIVER AT SENECA, IL (LAT 41 18 00 LONG 088 37 03)												
APR . 1979												
25...	<10	<10	<10	3800	10	130	.00	10	50	0	9	.0
25...	10	10	10	5100	10	180	.08	20	50	0	9	--
25...	10	10	10	6100	10	180	.00	20	70	0	0	--
05543510 - MARSEILLES CANAL AT MARSEILLES, IL (LAT 41 19 18 LONG 088 42 39)												
APR . 1979												
25...	<10	10	10	13000	10	280	.00	20	70	0	36	.0
25...	10	40	50	23000	50	570	.00	30	210	0	65	--
25...	<10	60	70	27000	60	610	.00	50	300	0	67	--
25...	<10	50	60	25000	60	550	.00	40	60	0	180	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39351)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG) (39363)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG) (39368)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG) (39373)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG) (39571)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39383)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG) (39393)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG) (39399)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG) (39413)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG) (39423)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG) (39343)
ILLINOIS RIVER BASIN--Continued											
05539450 - DES PLAINES RIVER AB CEDAR CR NR MILLSDALE, IL (LAT 41 28 02 LONG 088 09 49)											
APR , 1979											
24...	0	.0	.0	.0	--	.9	.0	--	.0	.0	.0
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
05539505 - DES PLAINES RIV AB JACKSON CR NR MILLSDALE, IL (LAT 41 26 17 LONG 088 10 15)											
APR , 1979											
24...	0	1.0	.0	.0	.0	4.1	.0	.0	.0	.0	.0
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
05541200 - DES PLAINES RIVER BL GRANT CR NR CHANNAHON, IL (LAT 41 23 01 LONG 088 14 25)											
APR , 1979											
24...	29	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
05542800 - ILLINOIS RIVER NEAR STOCKDALE, IL (LAT 41 19 57 LONG 088 30 09)											
APR , 1979											
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
05543010 - ILLINOIS RIVER AT SENECA, IL (LAT 41 18 00 LONG 088 37 03)											
APR , 1979											
25...	0	.0	.0	.0	.0	.6	.0	.0	.0	.0	.0
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
05543510 - MARSEILLES CANAL AT MARSEILLES, IL (LAT 41 19 18 LONG 088 42 39)											
APR , 1979											
25...	0	.0	.0	.0	.0	3.7	.0	.0	.0	.0	.0
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39531)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG) (39601)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG) (39791)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39541)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39403)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39787)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39731)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39741)	SILVEX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG) (39761)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)
ILLINOIS RIVER BASIN--Continued											
05539450 - DES PLAINES RIVER AB CEDAR CR NR MILLSDALE, IL (LAT 41 28 02 LONG 088 09 49)											
APR , 1979											
24...	--	--	--	--	0	--	0	0	.0	6	35
24...	--	--	--	--	--	--	--	--	--	20	49
24...	--	--	--	--	--	--	--	--	--	6	18
05539505 - DES PLAINES RIV AB JACKSON CR NR MILLSDALE, IL (LAT 41 26 17 LONG 088 10 15)											
APR , 1979											
24...	.0	.0	.0	.0	0	.0	0	0	.0	2	10
24...	--	--	--	--	--	--	--	--	--	4	13
24...	--	--	--	--	--	--	--	--	--	--	--
05541200 - DES PLAINES RIVER BL GRANT CR NR CHANNAHON, IL (LAT 41 23 01 LONG 088 14 25)											
APR , 1979											
24...	.0	.0	.0	.0	0	.0	0	0	.0	47	91
24...	--	--	--	--	--	--	--	--	--	15	45
24...	--	--	--	--	--	--	--	--	--	26	67
24...	--	--	--	--	--	--	--	--	--	23	58
05542800 - ILLINOIS RIVER NEAR STOCKDALE, IL (LAT 41 19 57 LONG 088 30 09)											
APR , 1979											
25...	--	--	--	--	--	--	--	--	--	13	29
25...	--	--	--	--	--	--	--	--	--	--	--
25...	.0	.0	.0	.0	0	.0	0	0	.0	--	--
05543010 - ILLINOIS RIVER AT SENECA, IL (LAT 41 18 00 LONG 088 37 03)											
APR , 1979											
25...	.0	.0	.0	.0	0	.0	0	0	.0	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
05543510 - MARSEILLES CANAL AT MARSEILLES, IL (LAT 41 19 18 LONG 088 42 39)											
APR , 1979											
25...	.0	.0	.0	.0	0	.0	0	0	.0	7	18
25...	--	--	--	--	--	--	--	--	--	38	87
25...	--	--	--	--	--	--	--	--	--	12	31
25...	--	--	--	--	--	--	--	--	--	13	44

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)
ILLINOIS RIVER BASIN--Continued											
05539450 - DES PLAINES RIVER AB CEDAR CR NR MILLSDALE, IL (LAT 41 26 02 LONG 088 09 49)											
APR , 1979											
24...	78	96	99	100	--	--	--	--	--	--	--
24...	62	72	87	92	--	--	--	--	--	--	--
24...	33	59	89	95	--	--	--	--	--	--	--
05539505 - DES PLAINES RIV AB JACKSON CR NR MILLSDALE, IL (LAT 41 26 17 LONG 088 10 15)											
APR , 1979											
24...	42	90	100	--	--	--	--	--	--	--	--
24...	38	67	78	92	--	--	--	--	--	--	--
24...	--	--	--	--	0	1	6	15	30	60	87
05541200 - DES PLAINES RIVER BL GRANT CR NR CHANNAHON, IL (LAT 41 23 01 LONG 088 14 25)											
APR , 1979											
24...	96	98	99	100	--	--	--	--	--	--	--
24...	75	96	99	100	--	--	--	--	--	--	--
24...	87	97	99	100	--	--	--	--	--	--	--
24...	73	91	99	100	--	--	--	--	--	--	--
05542800 - ILLINOIS RIVER NEAR STOCKDALE, IL (LAT 41 19 57 LONG 088 30 09)											
APR , 1979											
25...	35	44	47	48	--	--	--	--	--	--	--
25...	--	--	--	--	0	1	4	12	17	22	38
25...	--	--	--	--	1	1	8	45	59	68	82
05543010 - ILLINOIS RIVER AT SENECA, IL (LAT 41 18 00 LONG 088 37 03)											
APR , 1979											
25...	--	--	--	--	0	0	2	53	74	84	93
25...	--	--	--	--	0	0	2	27	55	81	96
25...	--	--	--	--	0	0	1	49	96	99	100
05543510 - MARSEILLES CANAL AT MARSEILLES, IL (LAT 41 19 18 LONG 088 42 39)											
APR , 1979											
25...	25	62	95	99	--	--	--	--	--	--	--
25...	95	99	100	--	--	--	--	--	--	--	--
25...	53	70	83	95	--	--	--	--	--	--	--
25...	58	63	64	67	--	--	--	--	--	--	--

MISCELLANEOUS TEMPERATURE MEASUREMENTS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)	DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)
ILLINOIS RIVER BASIN									
05528500 BUFFALO CREEK NEAR WHEELING, IL (LAT 42 09 05 LONG 087 57 25)									
OCT. 03.....	1500	15	20.0	17.5	MAR. 19.....	1745	334	17.5	6.0
NOV. 16.....	1030	7.4	5.0	3.5	MAY 01.....	1525	53	14.0	11.5
DEC. 19.....	0920	12	0.0	1.0	JUNE 11.....	1635	18	25.0	21.0
FEB. 06.....	1230	8.5	-15.0	0.0	JULY 26.....	1335	1.0	24.0	24.0
MAR. 06.....	1500	244	4.0	1.5	SEPT.11.....	1050	2.0	25.5	20.0
05529500 MC DONALD CREEK NEAR MOUNT PROSPECT, IL (LAT 42 05 42 LONG 087 54 46)									
OCT. 03.....	1615	2.4	17.5	16.5	MAR. 20.....	0850	55	8.0	6.0
NOV. 16.....	1430	1.4	3.5	5.0	MAY 01.....	1630	12	13.0	12.0
DEC. 19.....	1030	2.4	1.0	1.0	JUNE 21.....	1250	1.4	17.0	21.0
FEB. 06.....	1340	1.9	-15.0	0.0	JULY 26.....	1440	0.51	22.0	24.0
MAR. 05.....	1215	88	0.5	1.0	SEPT.11.....	1155	0.07	26.0	23.0
05530000 WEller CREEK AT DES PLAINES, IL (LAT 42 02 58 LONG 087 55 05)									
OCT. 03.....	1215	2.5	15.5	16.0	MAR. 13.....	1150	42	6.0	7.5
NOV. 06.....	1425	5.0	9.0	12.5	APR. 23.....	1315	2.6	24.0	18.5
DEC. 18.....	1400	3.8	5.0	3.5	JUNE 05.....	1300	1.5	27.5	21.0
JAN. 29.....	1330	3.2	-3.0	2.5	JUNE 26.....	1025	0.15	19.0	20.0
FEB. 23.....	1330	89	6.0	7.5	JULY 16.....	1240	0.91	26.0	25.5
MAR. 05.....	1330	160	0.0	5.0	AUG. 30.....	1115	4.0	23.5	22.0
05530990 SALT CREEK AT ROLLING MEADOWS, IL (LAT 42 03 37 LONG 088 00 59)									
OCT. 03.....	1340	12	17.0	17.0	APR. 23.....	1105	24	23.0	14.5
NOV. 06.....	1630	11	8.0	11.5	JUNE 05.....	1030	3.0	16.0	19.5
DEC. 18.....	1145	12	5.5	0.5	JUNE 26.....	0800	0.77	19.0	19.0
JAN. 29.....	1055	13	-4.0	0.0	JULY 16.....	1050	0.16	21.0	23.5
MAR. 05.....	1700	450	0.0	0.0	AUG. 30.....	1345	29	26.5	24.5
MAR. 13.....	0900	72	5.0	1.5					
05532500 DES PLAINES RIVER AT RIVERSIDE, IL (LAT 41 49 20 LONG 087 49 15)									
OCT. 12.....	1220	210	16.0	14.5	MAR. 12.....	1615	2420	0.0	2.0
NOV. 07.....	0950	250	6.5	11.5	APR. 24.....	1145	710	18.0	15.0
DEC. 19.....	1445	319	0.5	1.5	JUNE 06.....	1440	201	30.0	22.5
JAN. 30.....	0945	283	-3.0	0.0	JULY 17.....	1200	134	21.0	24.5
MAR. 05.....	1230	5880	0.0	0.0	AUG. 29.....	1045	1360	22.0	21.5
05533000 FLAG CREEK NEAR WILLOW SPRINGS, IL (LAT 41 44 20 LONG 087 53 48)									
OCT. 12.....	0820	6.2	11.5	16.0	MAR. 12.....	1130	42	1.0	7.0
NOV. 07.....	1310	7.6	10.5	14.0	APR. 24.....	0820	16	15.0	14.0
DEC. 19.....	0920	8.4	0.0	9.0	JUNE 06.....	0840	8.6	20.0	16.5
JAN. 30.....	1330	12	-3.5	7.0	JULY 17.....	0700	8.9	16.0	19.0
MAR. 05.....	1435	191	0.0	3.0	AUG. 29.....	1520	64	26.0	22.0
05535000 SKOKIE RIVER AT LAKE FOREST, IL (LAT 42 13 57 LONG 087 50 41)									
OCT. 02.....	1100	6.5	14.5	13.0	MAY 01.....	1350	35	11.0	9.0
NOV. 15.....	1015	3.0	2.0	6.0	JUNE 11.....	1303	2.5	22.5	20.5
DEC. 18.....	1045	4.0	4.0	1.5	JULY 25.....	1350	1.9	26.5	23.5
FEB. 05.....	1430	4.0	-20.0	0.0	SEPT.10.....	1245	0.90	25.0	20.5
MAR. 21.....	1310	68	5.0	5.0					
05535070 SKOKIE RIVER NEAR HIGHLAND PARK, IL (LAT 42 09 34 LONG 087 47 52)									
OCT. 02.....	1325	3.1	17.0	17.0	MAR. 21.....	1445	99	4.0	6.5
NOV. 15.....	1135	3.5	5.0	6.0	MAY 02.....	1040	38	18.0	9.5
DEC. 18.....	1210	6.9	5.0	1.0	JUNE 17.....	1450	4.8	24.0	20.0
FEB. 05.....	1630	8.1	-25.0	0.0	JULY 25.....	1700	6.1	28.5	24.0
MAR. 05.....	1150	222	-1.0	1.0	SEPT.10.....	1425	1.5	25.5	21.5
05535500 WEST FK OF N BR CHICAGO RIVER AT NORTHBROOK, IL (LAT 42 08 18 LONG 087 50 04)									
OCT. 02.....	1645	5.6	20.0	20.5	MAR. 20.....	1350	93	9.0	5.5
NOV. 15.....	1410	5.7	4.5	11.0	MAY 02.....	0915	20	15.0	13.0
DEC. 18.....	1320	7.6	4.5	7.0	JUNE 12.....	0930	3.9	16.0	16.0
FEB. 06.....	1115	10.0	-14.0	2.0	JULY 26.....	1130	3.8	22.5	22.0
MAR. 05.....	1415	175	-1.0	2.0	SEPT.10.....	1600	4.0	24.0	22.5

MISCELLANEOUS TEMPERATURE MEASUREMENTS

ILLINOIS RIVER BASIN --CONTINUED

05536210 THORN CREEK NEAR CHICAGO HEIGHTS, IL (LAT 41 30 50 LONG 087 38 07)

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)	DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)
OCT. 02.....	1345	0.44	21.0	16.0	APR. 05.....	1200	18	11.5	8.0
NOV. 01.....	1200	0.43	13.0	11.0	APR. 30.....	1050	55	6.0	9.0
DEC. 04.....	1110	12	-2.0	1.0	JUNE 01.....	1200	2.2	22.0	20.0
DEC. 19.....	1015	0.94	0.5	0.5	JULY 02.....	1130	2.1	23.0	19.5
JAN. 04.....	1345	3.6	-18.0	0.0	AUG. 01.....	1450	14	25.5	20.0
FEB. 02.....	0900	1.1	-7.0	0.0	SEPT.04.....	1310	0.54	22.0	19.5
MAR. 01.....	1100	17	6.0	1.0					

05536215 THORN CREEK AT GLENWOOD, IL (LAT 41 31 50 LONG 087 36 20)

OCT. 02.....	1050	18	18.0	19.0	APR. 05.....	1425	52	13.5	11.0
NOV. 01.....	1430	11	16.0	13.0	APR. 30.....	1205	109	7.5	11.0
DEC. 04.....	1500	34	1.0	9.0	JUNE 01.....	1256	24	23.0	21.0
JAN. 04.....	1530	25	-18.0	9.0	JULY 03.....	1445	22	24.0	21.0
FEB. 02.....	1015	19	-6.0	10.5	AUG. 02.....	1055	26	24.0	21.0
MAR. 01.....	1400	53	9.0	7.5	SEPT.04.....	1500	22	24.0	22.0

05536235 DEER CREEK NEAR CHICAGO HEIGHTS, IL (LAT 41 31 15 LONG 087 35 25)

OCT. 02.....	1420	0.90	21.0	15.5	MAR. 05.....	1245	392	0.0	0.5
NOV. 02.....	1045	0.18	14.0	9.0	APR. 23.....	1230	8.0	29.0	20.0
DEC. 14.....	1215	4.1	1.0	0.8	JUNE 05.....	1130	2.7	23.0	19.0
JAN. 22.....	1350	1.9	-2.0	0.0	AUG. 22.....	1600	25	26.0	22.0

05536255 BUTTERFIELD CREEK AT FLOSSMOOR, IL (LAT 41 32 25 LONG 087 38 55)

OCT. 02.....	1230	0.14	18.0	16.0	MAR. 05.....	1030	279	-1.0	0.5
NOV. 02.....	1215	0.54	15.0	10.0	APR. 23.....	1100	12	29.5	14.5
DEC. 14.....	1400	1.3	1.0	0.5	JUNE 05.....	1030	5.0	23.5	19.0
JAN. 22.....	1445	0.32	-2.0	0.5	AUG. 23.....	1530	31	29.0	23.5

05536265 LANSING DITCH NEAR LANSING, IL (LAT 41 31 40 LONG 087 31 45)

OCT. 03.....	0950	8.4	15.0	15.5	MAR. 05.....	1430	113	0.0	0.5
NOV. 02.....	0800	3.1	15.0	9.0	APR. 23.....	1400	9.2	18.0	16.0
DEC. 14.....	0900	3.5	-1.0	0.0	JUNE 05.....	1240	8.9	23.0	19.5
JAN. 22.....	1225	8.6	0.0	0.5	AUG. 22.....	1330	12	23.0	19.0

05536270 NORTH CREEK NEAR LANSING, IL (LAT 41 32 45 LONG 087 33 30)

OCT. 03.....	0900	10.0	16.0	16.0	MAR. 05.....	1600	221	0.5	0.5
NOV. 02.....	0930	3.0	15.0	8.0	APR. 23.....	1530	7.6	15.0	13.0
DEC. 14.....	1030	5.3	1.0	0.5	JUNE 05.....	1330	8.7	21.5	19.5
JAN. 22.....	1130	2.3	-6.7	0.5	AUG. 22.....	1000	19	23.5	20.0

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL (LAT 41 36 05 LONG 087 34 38)

OCT. 03.....	1155	118	15.0	17.5	APR. 24.....	1100	205	14.0	11.0
NOV. 02.....	1530	33	18.0	14.0	JUNE 05.....	1600	91	23.0	20.0
DEC. 13.....	1315	74	-3.0	3.0	JULY 18.....	1045	38	24.5	21.0
JAN. 23.....	0840	58	-4.0	0.5	AUG. 23.....	1615	271	28.0	24.5
MAR. 06.....	1110	1880	0.5	2.0					

05536340 MIDLOTHIAN CREEK AT OAK FOREST, IL (LAT 41 36 51 LONG 087 43 46)

OCT. 03.....	1310	2.6	15.0	16.0	MAR. 06.....	1520	182	2.0	2.0
NOV. 03.....	1200	1.3	12.0	9.0	MAY 31.....	1545	4.9	30.0	19.0
DEC. 15.....	1030	2.2	1.0	1.0	AUG. 24.....	0840	41	17.0	21.0
JAN. 23.....	1120	2.2	-0.5	0.0					

05536500 TINLEY CREEK NEAR PALOS PARK, IL (LAT 41 38 48 LONG 087 45 59)

OCT. 03.....	1435	5.3	15.0	16.5	MAR. 06.....	1615	99	2.0	0.5
NOV. 03.....	1230	0.32	13.0	9.0	APR. 24.....	1515	9.9	17.0	15.0
DEC. 15.....	1130	1.1	5.0	1.0	MAY 31.....	1500	1.1	29.0	20.0
JAN. 23.....	1215	0.95	0.0	0.0	AUG. 24.....	1100	25	22.0	21.0

05537500 LONG RUN NEAR LEMONT, IL (LAT 41 38 33 LONG 087 59 57)

OCT. 04.....	0900	0.89	14.0	13.5	MAR. 07.....	1040	182	1.0	0.5
OCT. 31.....	1520	0.48	16.0	13.0	APR. 25.....	0930	29	21.0	15.5
DEC. 15.....	1400	1.8	3.0	1.0	MAY 31.....	1200	2.4	26.0	18.5
JAN. 23.....	1405	2.8	0.0	0.0	AUG. 11.....	1720	41	28.5	22.0

MISCELLANEOUS TEMPERATURE MEASUREMENTS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)	DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)
ILLINOIS RIVER BASIN --CONTINUED									
05549000 BOONE CREEK NEAR MC HENRY, IL (LAT 42 19 15 LONG 088 18 45)									
OCT. 04.....	1440	11	15.5	13.0	MAY 08.....	0940	26	23.5	16.5
NOV. 29.....	1320	15	2.0	5.0	JUNE 19.....	1145	13	23.0	19.5
DEC. 14.....	1430	11	2.0	4.0	JULY 16.....	1415	9.0	25.0	18.0
JAN. 09.....	1140	10.0	-7.0	0.0	JULY 20.....	0955	9.7	23.0	17.0
FEB. 13.....	1130	10.0	0.5	3.5	SEPT.06.....	1300	10.0	25.0	20.5
MAR. 21.....	1450	52	9.0	7.0	SEPT.11.....	1045	9.5	22.0	17.5
05551200 FERSON CREEK NEAR ST. CHARLES, IL (LAT 41 56 00 LONG 088 20 30)									
OCT. 13.....	0830	16	8.0	11.0	MAR. 26.....	1100	195	5.0	2.0
NOV. 28.....	1035	27	-6.0	2.0	MAY 07.....	1030	106	17.5	14.5
JAN. 08.....	1150	20	-18.0	0.0	JUNE 18.....	1010	43	17.5	18.0
JAN. 23.....	1425	23	-1.0	0.5	JULY 23.....	1045	9.1	29.0	23.5
FEB. 12.....	1115	18	-2.0	0.0	SEPT.10.....	1015	21	19.0	18.0
MAR. 05.....	1810	324	1.0	0.5					
05554500 VERMILION RIVER AT PONTIAC, IL (LAT 40 52 40 LONG 088 38 10)									
OCT. 27.....	1730	29	16.5	12.0	MAR. 14.....	1500	4050	2.5	1.5
NOV. 27.....	1730	29	16.5	12.0	APR. 20.....	1310	773	23.5	12.0
DEC. 12.....	1215	46	---	1.0	JUNE 07.....	1300	135	23.5	23.5
JAN. 23.....	1415	41	0.0	0.5	AUG. 16.....	1545	30	27.0	24.0
MAR. 05.....	1400	7760	0.0	2.0	SEPT.06.....	1545	86	30.0	24.0
05560500 FARM CREEK AT FARMDALE, IL (LAT 40 40 00 LONG 089 30 15)									
OCT. 13.....	1145	1.4	15.0	12.0	MAY 17.....	1115	16	23.0	17.0
DEC. 01.....	1000	2.8	5.0	2.0	JUNE 26.....	1445	2.5	27.0	27.5
JAN. 10.....	1100	0.50	-12.0	0.0	AUG. 08.....	1015	1.4	29.5	26.5
FEB. 28.....	1530	14	5.0	0.0	SEPT.18.....	1715	0.89	24.5	21.0
MAR. 28.....	1245	146	8.0	5.5					
05561000 ACKERMAN CREEK AT FARMDALE, IL (LAT 40 39 43 LONG 089 30 13)									
OCT. 13.....	1245	0.29	16.0	17.0	MAY 17.....	0930	5.3	23.0	15.0
DEC. 06.....	1400	0.68	-3.5	3.5	JUNE 26.....	1130	0.33	25.0	24.0
JAN. 10.....	1255	0.40	-12.0	0.5	AUG. 08.....	0900	0.25	28.0	29.0
FEB. 28.....	1330	9.6	5.0	5.0	SEPT.19.....	0900	0.23	15.0	17.5
MAR. 28.....	1030	57	7.5	5.0					
05561500 FONDULAC CREEK NEAR EAST PEORIA, IL (LAT 40 40 38 LONG 089 31 52)									
OCT. 04.....	1145	0.05	18.0	14.0	FEB. 28.....	1715	4.8	4.0	0.0
DEC. 06.....	1545	0.44	-5.0	0.0	MAR. 27.....	1600	5.9	20.0	7.0
JAN. 09.....	1615	0.31	-8.0	0.0	MAY 17.....	1145	1.0	25.0	16.5
05562000 FARM CREEK AT EAST PEORIA, IL (LAT 40 40 04 LONG 089 34 40)									
OCT. 10.....	1600	2.4	15.5	15.5	JUNE 25.....	1230	4.7	28.0	28.0
DEC. 06.....	1245	6.9	-4.0	0.0	AUG. 07.....	1200	2.2	29.5	34.0
JAN. 09.....	1515	---	-7.0	0.0	SEPT.19.....	1100	1.2	19.5	20.5
MAR. 26.....	1500	86	7.0	7.0					
05564400 MONEY CREEK NEAR TOWANDA, IL (LAT 40 36 19 LONG 088 53 56)									
DEC. 12.....	0930	0.11	2.0	1.0	JUNE 06.....	1450	12	32.5	24.0
JAN. 23.....	1145	0.61	-1.0	0.0	AUG. 16.....	1800	0.62	26.5	22.5
MAR. 05.....	1145	504	1.5	1.5	SEPT.05.....	1500	0.69	31.0	25.0
APR. 12.....	1445	1550	23.5	14.5					
05566500 EAST BRANCH PANTHER CREEK AT EL PASO, IL (LAT 40 45 15 LONG 089 00 20)									
OCT. 23.....	1500	0.42	13.5	13.5	APR. 19.....	1600	34	13.0	10.0
DEC. 11.....	1515	0.45	1.0	1.0	JUNE 06.....	1230	6.6	---	23.0
JAN. 23.....	1300	0.35	-0.5	0.5	AUG. 09.....	1600	1.2	30.0	32.5
MAR. 05.....	1600	250	1.0	1.5	SEPT.05.....	1315	0.45	30.0	25.0
05567500 MACKINAW RIVER NEAR CONGERVILLE, IL (LAT 40 37 25 LONG 089 14 30)									
OCT. 13.....	1445	7.8	17.0	14.5	MAY 23.....	1030	328	19.0	17.5
NOV. 27.....	1520	24	-1.0	3.0	JUNE 28.....	1130	92	31.0	24.0
JAN. 02.....	1445	50	-6.0	0.0	AUG. 09.....	1300	96	29.0	29.0
MAR. 06.....	1230	6680	2.5	2.0	SEPT.20.....	1330	21	26.0	19.5
APR. 11.....	1145	743	9.0	7.0					

MISCELLANEOUS TEMPERATURE MEASUREMENTS

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)	DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	AIR TEMPERATURE (DEG C)	WATER TEMPERATURE (DEG C)
ILLINOIS RIVER BASIN --CONTINUED									
05556500 ILLINOIS RIVER AT KINGSTON MINES, IL (LAT 40 33 10 LONG 089 46 40)									
NOV. 16.....	1200	7260	7.0	9.0	MAR. 26.....	1440	72600	4.0	4.5
05572000 SANGAMON RIVER AT MONTICELLO, IL (LAT 40 01 51 LONG 088 35 20)									
OCT. 26.....	1500	16	11.0	13.0	MAR. 28.....	1115	1610	9.5	6.0
NOV. 27.....	1045	16	8.0	10.0	APR. 25.....	1110	2110	23.0	16.5
DEC. 20.....	1000	34	8.0	4.0	MAY 29.....	1000	231	19.0	17.0
JAN. 23.....	1230	44	0.5	0.0	JUNE 27.....	0930	91	28.0	22.5
FEB. 08.....	1220	248	---	0.0	AUG. 30.....	1230	198	28.0	23.0
MAR. 06.....	1240	9120	10.0	1.5	SEPT.27.....	1700	24	27.0	19.0
05572450 FRIENDS CREEK AT ARGENTA, IL (LAT 39 59 21 LONG 088 48 18)									
OCT. 06.....	1200	1.1	13.0	13.0	APR. 19.....	1000	350	12.0	1.0
NOV. 21.....	1030	2.1	4.0	5.0	MAY 18.....	1030	87	20.0	15.0
DEC. 11.....	1230	---	6.0	3.5	JUNE 27.....	1445	12	27.0	23.0
JAN. 04.....	1230	29	---	1.0	AUG. 16.....	1515	7.3	21.5	20.0
FEB. 27.....	1045	151	3.0	0.0	SEPT.18.....	1130	---	23.0	18.5
APR. 18.....	1100	396	15.0	9.5					
05575800 HORSE CREEK AT PAWNEE, IL (LAT 39 34 56 LONG 089 34 20)									
NOV. 30.....	1045	0.09	0.5	3.5	APR. 17.....	1245	82	13.0	12.5
JAN. 09.....	1100	0.25	-8.0	0.5	JULY 17.....	1700	0.14	25.0	20.5
MAR. 02.....	1000	245	3.0	0.5					
05575830 BRUSH CREEK NEAR DIVERNON, IL (LAT 39 35 50 LONG 089 37 48)									
OCT. 17.....	1030	0.18	10.0	8.0	JUNE 05.....	1030	3.4	30.5	21.0
NOV. 30.....	0915	0.91	-1.0	2.0	JULY 18.....	0545	0.30	14.0	19.5
JAN. 09.....	1200	0.84	-8.0	0.5	SEPT.05.....	1530	0.20	29.0	25.5
FEB. 23.....	0900	263	4.0	1.0					
05576000 SOUTH FORK SANGAMON RIVER NEAR ROCHESTER, IL (LAT 39 44 32 LONG 089 34 02)									
OCT. 19.....	1130	7.7	14.5	11.0	MAY 02.....	1145	---	22.5	13.5
NOV. 29.....	1545	34	9.0	3.5	JUNE 14.....	1300	129	30.0	26.0
JAN. 09.....	1400	195	-8.0	0.5	JULY 06.....	0930	41	21.0	21.5
JAN. 10.....	1115	78	---	0.5	AUG. 01.....	1430	550	22.0	23.0
MAR. 01.....	1530	---	2.5	1.0	SEPT.05.....	1300	35	27.0	25.0
APR. 13.....	1130	11500	13.0	12.0	SEPT.18.....	1630	---	22.0	21.0
05577500 SPRING CREEK AT SPRINGFIELD, IL (LAT 39 48 57 LONG 089 41 57)									
OCT. 18.....	1230	0.07	19.0	10.0	FEB. 21.....	1445	59	3.0	2.0
OCT. 24.....	1305	0.09	16.0	10.0	JUNE 13.....	1245	16	26.5	22.0
NOV. 15.....	1300	0.51	5.0	8.5	JULY 06.....	0800	12	22.0	20.5
NOV. 29.....	0915	1.1	3.5	2.0	AUG. 01.....	1615	518	22.5	22.0
JAN. 10.....	1525	1.0	---	0.5					
05580950 SUGAR CREEK NEAR BLOOMINGTON, IL (LAT 40 28 18 LONG 089 01 46)									
OCT. 23.....	1230	33	9.0	16.5	APR. 19.....	1245	66	---	13.0
DEC. 11.....	1245	23	0.5	10.0	JUNE 06.....	1630	23	31.5	20.0
JAN. 23.....	0915	18	-1.5	2.0	AUG. 09.....	1300	20	30.5	25.0
MAR. 06.....	1500	259	2.0	2.0	SEPT.06.....	1200	22	27.0	23.0
05584400 DROWNING FORK AT BUSHNELL, IL (LAT 40 33 45 LONG 090 31 23)									
OCT. 03.....	1345	0.60	16.0	16.0	MAR. 30.....	1100	287	16.0	14.0
NOV. 30.....	1345	1.6	1.0	2.0	MAY 08.....	1700	32	31.0	20.5
JAN. 05.....	1140	1.1	2.0	0.5	JUNE 19.....	1000	11	28.0	21.0
05585500 ILLINOIS RIVER AT MEREDOSIA, IL (LAT 39 49 24 LONG 090 34 05)									
NOV. 07.....	0800	5590	4.5	12.5	APR. 05.....	1200	103000	13.0	11.0
MAR. 29.....	1130	95700	10.0	10.0	AUG. 29.....	1430	28200	25.5	24.0
05586800 OTTER CREEK NEAR PALMYRA, IL (LAT 39 22 42 LONG 089 56 50)									
DEC. 14.....	1010	1.4	1.5	1.0	MAY 01.....	1320	46	16.0	12.0
JAN. 31.....	1355	1.7	-10.0	0.0	JUNE 15.....	1010	1.4	25.0	22.0
FEB. 27.....	0935	88	-2.0	1.5	AUG. 01.....	1250	386	27.0	25.0
MAR. 15.....	1130	56	-1.0	3.5					

BUREAU COUNTY

412220089280301. Local number, 16N-9E-16.8e.
LOCATION.--Lat 41°22'20", long 89°28'03", Hydrologic Unit 07130001, 326 First Street, Princeton.
Owner: Helen Croisant.
AQUIFER.--Glacial Drift.
WELL CHARACTERISTICS.--Dug unused water-table well, diameter 32 in (0.81 m), depth 29 ft (8.84 m), cribbed with brick.
DATUM.--Land surface datum is 698 ft (213 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 3 ft (0.91 m) below land-surface datum, since Aug. 5, 1959.
PERIOD OF RECORD.--November 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.94 ft (0.90 m) below land-surface datum, May 15, 1943; lowest, 26.64 ft (8.12 m) below land-surface datum, Mar. 30, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	10.09	DEC 10	9.25	FEB 10	10.40	APR 10	5.52	JUN 10	7.80	AUG 10	11.20
20	10.50	20	9.35	20	10.45	20	5.55	26	8.45	20	4.15
NOV 10	10.90	JAN 10	9.58	MAR 10	4.97	MAY 10	5.62	JUL 10	9.28	SEP 7	8.28
20	10.04	22	10.00	20	4.37	20	6.42	20	9.78	24	10.04

DU PAGE COUNTY

414236087583301. Local number, 37N-11E-9HI.
LOCATION.--Lat 41°42'36", long 87°58'33", Hydrologic Unit 07120004, at Argonne National Laboratory.
Owner: Argonne National Laboratory.
AQUIFER.--Niagara Dolomite of Middle Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth 199 ft (60.7 m), cased to 86 ft (26.2 m).
DATUM.--Land-surface datum is 705 ft (215 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.40 ft (0.73 m) above land-surface datum.
REMARKS.--Water levels affected by pumping of nearby wells.
PERIOD OF RECORD.--November 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 57.79 ft (17.6 m) below land-surface datum, May 8, 1950; lowest, 91.59 ft (27.9 m) below land-surface datum, Sept. 23, 1977.
REVISIONS.--The maximum water level for water year 1978 has been revised to 87.62 ft May 15, 1978, superseding figure published in the report for 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.40	89.67	89.11	89.52	89.29	89.15	87.98	87.28	87.63	88.71	90.65	90.33
10	89.71	89.93	89.49	89.81	89.47	89.16	87.75	86.85	88.22	88.50	90.55	90.24
15	89.70	89.86	---	89.98	89.24	89.29	87.54	87.58	88.24	89.18	90.34	91.70
20	89.84	89.81	88.83	89.32	89.22	88.49	87.41	86.86	88.18	89.44	89.86	90.26
25	89.30	89.66	89.07	89.13	89.44	88.08	87.23	86.78	88.13	89.63	90.22	89.79
EOM	90.00	89.64	89.38	89.51	89.08	88.37	87.33	86.93	88.08	89.96	90.17	89.24

WTR YR 1979 HIGH 86.78 May 25 LOW 91.08 Oct. 1

DU PAGE COUNTY--Continued

414217087592801. Local number 37N-11E-9KI.
LOCATION.--Lat 41°42'17", long 87°59'28", Hydrologic Unit 07120004, at Argonne National Laboratory.
Owner: Argonne National Laboratory.
AQUIFER.--Niagara Dolomite of Middle Silurian Age.
WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4.0 in (0.10 m), depth 140 ft (42.7 m), cased to 90.0 ft (27.4 m), open end.
DATUM.--Land-surface datum is 733 ft (223 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.31 ft (0.09 m) above land-surface datum.
REMARKS.--Water levels affected by pumping of nearby wells.
PERIOD OF RECORD.--December 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 88.97 ft (27.1 m) below land-surface datum, May 27, 1951; lowest measured, 101.05 ft (30.8 m) below land-surface datum, Jan. 5, 1979.
REVISIONS.--Revised figures of water level for the water year 1978, superseding those published in the report for 1978, are given herein.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.54	100.38	100.16	100.65	100.41	100.07	99.91	99.63	99.57	99.93	100.05	100.27
10	100.37	100.16	100.47	100.68	99.99	100.08	99.64	99.67	99.66	100.02	99.96	100.29
15	100.47	100.19	---	100.73	99.89	100.05	99.74	99.40	99.94	99.99	99.96	100.38
20	---	100.22	100.36	100.76	99.89	100.05	99.60	99.58	99.91	100.10	100.08	100.39
25	100.41	100.23	100.47	100.66	100.05	100.27	99.73	99.52	99.92	100.12	100.15	100.64
EOM	100.39	100.38	100.66	100.42	---	100.01	99.72	99.45	100.00	99.34	100.15	100.51

WTR YR 1978 HIGH 99.14 May 13 LOW 100.76 Jan. 20

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	100.66	100.74	100.48	101.05	100.87	---	100.82	100.12	100.24			
10	100.80	100.67	100.85	100.96	---	---	100.53	100.89	100.59			
15	100.70	100.83	100.65	100.87	---	---	100.38	100.99	100.64			
20	100.71	100.91	100.56	100.74	---	---	100.38	100.64	100.67			
25	100.58	100.75	100.59	100.56	---	100.79	100.29	100.08	---			
EOM	100.84	100.69	100.85	100.70	---	100.85	100.19	100.13	---			

WTR YR 1979 HIGH 98.72 May 8 LOW 101.05 Jan. 5

FULTON COUNTY

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
403001090062102	79-05-09	1435	80010	17001	4250	6.9	12.7	270	150	460	12
	79-06-20	0935	80010	17001	4000	7.2	12.5	250	180	670	12
	79-08-01	1035	80010	17001	3800	7.2	--	260	150	740	14
	79-08-29	1012	80010	17001	4000	7.0	--	210	180	490	15
403002090062601	79-05-10	1300	80010	17001	570	7.2	--	61	15	12	6.0
	79-06-21	1330	80010	17001	1100	7.3	--	120	41	41	5.0
	79-08-01	1420	80010	17001	1420	7.1	--	100	97	240	7.0
	79-08-29	1430	80010	17001	1800	7.2	--	84	82	240	7.0
403004090061801	79-05-10	1235	80010	17001	2450	7.1	--	35	190	270	4.0
	79-08-01	1445	80010	17001	3650	6.9	--	130	280	310	6.0
403005090063101	79-08-01	1400	80010	17001	2250	7.2	--	100	97	240	7.0
	79-08-29	1410	80010	17001	2250	7.5	--	84	82	240	7.0
403009090061101	79-05-10	1115	80010	17001	5000	7.1	--	280	510	530	7.0
	79-06-21	1215	80010	17001	5050	7.3	--	240	420	1200	8.0
	79-08-01	1500	80010	17001	5800	7.0	--	230	480	550	11
	79-08-29	1300	80010	17001	6000	7.1	--	230	395	560	10
403011090061001	79-05-09	1545	80010	17001	6250	6.6	12.8	420	270	400	29
	79-06-20	1040	80010	17001	5000	6.8	12.4	380	320	850	31
	79-08-01	1105	80010	17001	5200	6.8	--	250	250	460	36
	79-08-28	1135	80010	17001	5050	6.7	--	250	290	450	32
403011090061002	79-05-09	1600	80010	17001	4100	6.6	12.5	480	380	300	10
	79-06-20	1100	80010	17001	5000	6.8	12.0	570	400	310	11
	79-08-01	1115	80010	17001	4800	6.9	--	220	380	300	13
	79-08-28	1210	80010	17001	5200	6.7	--	410	360	290	13
403014090061101	79-05-10	1135	80010	17001	4150	7.3	--	270	490	390	13
	79-06-21	1245	80010	17001	5000	7.2	--	220	390	540	11
	79-08-01	1420	80010	17001	5400	6.7	--	250	510	380	16
	79-08-29	1330	80010	17001	5750	6.9	--	91	240	96	5.0
`3017090061601	79-05-10	0900	80010	17001	3500	6.9	12.7	270	130	640	15
	79-06-20	1230	80010	17001	4600	7.1	12.7	320	150	1000	17
	79-08-01	1305	80010	17001	4800	6.8	--	210	130	840	19
	79-08-29	1100	80010	17001	4800	6.9	--	220	140	760	22
403017090061602	79-05-10	0920	80010	17001	3500	6.9	12.7	260	120	680	14
	79-06-20	1300	80010	17001	--	--	12.5	--	140	--	--
	79-08-01	1315	80010	17001	--	6.9	--	--	120	890	15
	79-08-29	1110	80010	17001	4600	6.9	--	190	120	710	16
403017090061603	79-05-10	1000	80010	17001	3400	6.8	12.7	260	140	610	14
	79-06-20	1300	80010	17001	4300	7.0	12.6	270	160	780	16
	79-08-01	1330	80010	17001	4600	6.9	--	240	150	620	20
	79-08-29	1130	80010	17001	5000	6.8	--	220	190	630	25
403018090061701	79-05-10	1200	80010	17001	850	7.5	--	46	67	50	2.0
	79-06-21	1305	80010	17001	1120	7.6	--	17	88	57	2.0
	79-08-01	1345	80010	17001	1600	7.2	--	77	160	75	4.0
	79-08-29	1345	80010	17001	2100	7.4	--	91	240	96	5.0

FULTON COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
403001090062102	79-05-09	930	1400	92	.06	1.2	1.1	.03	<500	10
	79-06-20	970	1300	90	.05	.90	1.8	.23	<500	10
	79-08-01	920	1500	77	.06	.90	1.3	<.01	<500	<5
	79-08-29	970	1200	94	.05	.70	1.2	.01	<500	<5
403002090062601	79-05-10	110	80	7.0	15	1.4	2.2	.02	<500	<5
	79-06-21	180	390	9.0	7.8	.40	1.8	.04	1000	10
	79-08-01	340	3900	32	57	.20	.80	<.01	<500	10
	79-08-29	340	960	40	44	.20	1.0	.02	<500	<5
403004090061801	79-05-10	230	990	64	.46	.40	.40	.01	<500	<5
	79-08-01	430	1900	62	.13	1.8	1.9	<.01	<500	10
403005090063101	79-08-01	340	3900	32	57	.20	.80	<.01	<500	10
	79-08-29	340	960	40	44	.20	1.0	.02	<500	<5
403009090061101	79-05-10	510	3400	46	.08	.30	.50	.05	<500	10
	79-06-21	530	360	42	.00	.00	.60	.10	<500	20
	79-08-01	640	810	42	.14	.20	.70	<.01	1000	30
	79-08-29	670	3200	46	.02	.30	.60	.08	<500	<5
403011090061001	79-05-09	930	890	94	.08	42	45	.04	<500	10
	79-06-20	1040	2700	98	.15	42	42	.10	<500	20
	79-08-01	1060	2300	88	.10	41	44	.05	<500	10
	79-08-28	1050	2200	83	.03	44	45	.01	<500	10
403011090061002	79-05-09	870	3500	31	.14	.90	.80	.02	<500	10
	79-06-20	980	3100	32	.08	.80	1.0	.06	<500	10
	79-08-01	940	2400	23	.13	.50	.90	.02	1000	30
	79-08-28	960	1600	33	.03	.60	1.0	.01	<500	10
403014090061101	79-05-10	310	2600	55	.07	.30	.20	.02	<500	10
	79-06-21	370	3300	58	.00	.10	1.0	.01	<500	20
	79-08-01	590	770	61	.12	.20	1.1	.00	<500	10
	79-08-29	400	1000	11	.04	.10	.30	.03	<500	<5
403017090061601	79-05-10	870	2700	41	.11	2.8	2.8	.16	<500	20
	79-06-20	970	2100	40	.08	2.7	4.3	.49	<500	10
	79-08-01	940	1800	30	.11	2.5	2.5	.01	<500	10
	79-08-29	1040	1200	44	.05	2.4	2.6	.01	<500	<5
403017090061602	79-05-10	1010	870	53	.09	2.2	2.4	.03	<500	10
	79-06-20	1100	1800	59	.07	1.8	3.0	.27	<500	<5
	79-08-01	1090	1300	52	.13	1.7	1.7	.01	<500	10
	79-08-29	1070	1900	66	.04	1.5	2.0	.10	<500	<5
403017090061603	79-05-10	930	1600	39	.10	3.6	3.7	.08	<500	10
	79-06-20	910	2100	38	.07	3.2	4.6	.07	<500	<5
	79-08-01	1070	1400	38	.35	3.0	3.2	.01	<500	<5
	79-08-29	920	2100	48	.19	2.9	3.3	.09	<500	<5
403018090061701	79-05-10	280	190	17	.05	.20	.20	.01	<500	<5
	79-06-21	300	320	12	.00	.00	.50	.01	<500	10
	79-08-01	360	4700	7.0	.17	.10	.30	<.01	<500	<5
	79-08-29	400	1000	11	.04	.10	.30	.03	<500	<5

FULTON COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
403001090062102	79-05-09	<15	<5	3800	<5	4500	.0	100	<150	<50
	79-06-20	20	10	500	10	5200	.0	200	<150	<50
	79-08-01	<15	20	600	<5	5000	.2	200	<150	<50
	79-08-29	30	10	400	100	4900	.3	100	<150	<50
403002090062601	79-05-10	<15	<5	<50	<5	190	.3	100	<150	9400
	79-06-21	20	40	3400	200	850	.1	400	<150	26000
	79-08-01	<15	<5	<50	70	130	.0	100	<150	8700
	79-08-29	20	10	200	200	150	.0	100	<150	12000
403004090061801	79-05-10	<15	20	7900	<5	60	.2	<50	<150	33000
	79-08-01	<15	<5	26000	<5	650	.0	<50	<150	39000
403005090063101	79-08-01	<15	<5	<50	70	130	.0	100	<150	8700
	79-08-29	20	10	200	200	150	.0	100	<150	12000
403009090061101	79-05-10	20	<5	3200	<5	490	.0	700	<150	45700
	79-06-21	<15	10	5200	230	740	.0	100	<150	34600
	79-08-01	60	50	3500	100	750	.0	600	<150	22500
	79-08-29	30	10	3600	200	1000	.3	200	<150	44400
403011090061001	79-05-09	<15	10	6000	<5	5400	.0	100	<150	100
	79-06-20	<15	10	8000	200	9300	.0	200	<150	<50
	79-08-01	<15	20	7700	60	6600	.2	300	<150	<50
	79-08-28	30	50	4000	200	4300	.3	100	<150	1400
403011090061002	79-05-09	<15	20	1500	<5	9200	.0	100	<150	100
	79-06-20	<15	10	600	260	1800	.0	300	<150	<50
	79-08-01	70	70	2300	230	9700	.1	400	<150	400
	79-08-28	40	30	1500	100	10000	.0	200	<150	400
403014090061101	79-05-10	20	<5	2900	<5	190	.2	<50	<150	17000
	79-06-21	<15	20	5300	130	360	.0	<50	<150	39000
	79-08-01	20	10	5400	100	560	.0	100	<150	58000
	79-08-29	40	10	8000	200	530	.0	<50	<150	11000
403017090061601	79-05-10	<15	<5	3500	<5	1900	.0	100	<150	<50
	79-06-20	20	<5	2300	70	2100	.0	200	<150	<50
	79-08-01	30	40	800	110	2000	.2	100	<150	<50
	79-08-29	20	20	400	200	2000	.1	<50	<150	<50
403017090061602	79-05-10	20	<5	700	<5	2100	.0	100	<150	100
	79-06-20	<15	<5	300	40	2400	.0	300	<150	<50
	79-08-01	30	50	400	100	2200	.2	200	<150	<50
	79-08-29	20	10	200	<5	2300	.2	<50	<150	<50
403017090061603	79-05-10	<15	<5	3400	<5	1900	.0	100	<150	<50
	79-06-20	<15	<5	1900	80	200	.1	--	<150	<50
	79-08-01	40	10	900	<5	2500	.3	100	<150	<50
	79-08-29	20	10	1400	200	2900	.3	100	<150	<50
403018090061701	79-05-10	<15	<5	100	<5	140	.0	<50	<150	5100
	79-06-21	<15	10	2300	50	170	--	<50	--	6400
	79-08-01	20	<5	8200	20	350	.0	100	<150	5600
	79-08-29	40	10	8000	200	530	.0	<50	<150	11000

FULTON COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)
402950090061101	79-05-08	1420	80010	17001	4250	6.7	12.7	290	210	280	20
	79-06-19	1300	80010	17001	3000	6.8	12.6	100	190	270	15
	79-07-31	1205	80010	17001	3300	6.7	--	230	180	270	18
	79-08-28	1320	80010	17001	3400	6.7	--	200	210	270	20
402954090060101	79-05-08	1230	80010	17001	3350	6.7	12.5	370	200	210	13
	79-06-19	1125	80010	17001	3200	6.8	12.4	580	250	200	9.0
	79-07-31	1145	80010	17001	3600	6.8	--	240	250	180	11
	79-08-28	1230	80010	17001	3500	6.7	--	230	280	190	13
402954090060102	79-05-08	1245	80010	17001	2700	6.7	12.4	310	170	190	11
	79-06-19	1230	80010	17001	2650	6.8	12.4	70	180	200	9.0
	79-07-31	1200	80010	17001	3000	6.3	--	220	180	190	12
	79-08-28	1300	80010	17001	3000	6.7	--	220	200	190	13
402959090064101	79-05-08	1500	80010	17001	3300	6.9	12.3	190	120	440	39
	79-06-19	1330	80010	17001	4000	7.0	12.4	160	110	440	33
	79-07-31	1400	80010	17001	4000	6.9	--	180	110	850	43
	79-08-28	1430	80010	17001	4250	7.0	--	160	130	580	46
403001090062101	79-05-09	1400	80010	17001	4100	7.8	12.5	69	120	600	14
	79-06-20	0906	80010	17001	3150	8.0	12.4	70	130	750	14
	79-08-01	1022	80010	17001	3650	8.0	--	60	110	600	16
	79-08-29	1000	80010	17001	3600	7.9	--	46	120	620	17
403001090062102	79-05-09	1435	80010	17001	4250	6.9	12.7	270	150	460	12
	79-06-20	0935	80010	17001	4000	7.2	12.5	250	180	670	12
	79-08-01	1035	80010	17001	3800	7.2	--	260	150	740	14
	79-08-29	1012	80010	17001	4000	7.0	--	210	180	490	15
403001090062103	79-05-09	1515	80010	17001	3100	7.0	12.7	250	140	420	12
	79-06-20	1000	80010	17001	3600	7.1	12.5	230	160	450	11
	79-08-01	1045	80010	17001	3600	7.1	--	240	140	740	13
	79-08-29	1030	80010	17001	3700	7.1	--	240	160	440	14
403007090063501	79-05-09	1300	80010	17001	2900	7.8	12.3	40	83	430	9.0
	79-06-20	0800	80010	17001	2350	8.1	11.9	30	67	410	7.0
	79-08-01	0900	80010	17001	2650	8.1	--	28	85	420	11
	79-08-29	0900	80010	17001	2650	8.4	--	19	68	460	12
403007090063502	79-05-09	1320	80010	17001	3050	6.8	12.3	190	90	340	5.0
	79-06-20	0815	80010	17001	2550	7.1	11.7	120	61	630	7.0
	79-08-01	0915	80010	17001	2850	6.9	--	170	85	780	10
	79-08-29	0915	80010	17001	2900	7.1	--	130	71	430	11
403007090063503	79-05-09	1345	80010	17001	2400	6.9	12.3	290	140	51	3.0
	79-06-20	0840	80010	17001	2075	7.0	11.8	180	120	49	3.0
	79-08-01	0915	80010	17001	2000	6.9	--	260	120	45	4.0
	79-08-29	0915	80010	17001	2000	7.0	--	190	130	34	4.0
403017090063201	79-05-09	1200	80010	17001	4900	6.9	12.7	150	70	780	18
	79-06-20	1200	80010	17001	4200	7.1	12.8	130	60	1200	15
	79-07-31	1455	80010	17001	4400	6.9	--	140	80	1100	20
	79-08-29	0830	80010	17001	4550	7.0	--	130	60	840	23
403024090064801	79-05-09	0800	80010	17001	2800	7.0	12.0	250	100	340	17
	79-06-19	1500	80010	17001	3450	6.9	12.0	230	110	620	16
	79-07-31	1405	80010	17001	3300	6.8	--	270	110	630	22
	79-08-28	1500	80010	17001	3400	6.9	--	210	120	390	24
403029090063701	79-05-09	1000	80010	17001	5500	6.9	12.4	200	76	810	22
	79-06-19	1530	80010	17001	4200	7.1	12.4	150	60	1200	19
	79-07-31	1430	80010	17001	4900	6.9	--	170	80	1000	25
	79-08-28	1525	80010	17001	5000	7.1	--	140	60	920	30

FULTON COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	ALKALINITY (MG/L AS CACO3) (00410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
402950090061101	79-05-08	840	2100	100	.06	6.4	6.6	.04	<500	10
	79-06-19	850	1300	100	.07	7.1	8.2	.31	<500	10
	79-07-31	860	1100	94	.04	6.9	7.0	.19	<500	<5
	79-08-28	820	950	110	.05	6.3	7.4	.06	<500	<5
402954090060101	79-05-08	780	2400	14	.08	.90	.90	.03	<500	10
	79-06-19	700	1900	11	.06	1.4	1.7	.09	1000	10
	79-07-31	690	1700	7.0	.10	1.5	1.7	.01	<500	<5
	79-08-28	690	2000	11	.35	1.4	1.6	.07	<500	<5
402954090060102	79-05-08	810	850	13	.07	.90	.90	.02	<500	10
	79-06-19	770	1300	13	.08	1.1	1.9	.18	<500	10
	79-07-31	760	1300	8.0	.06	1.2	1.6	.00	<500	<5
	79-08-28	780	1100	13	.07	1.1	1.3	.06	<500	<5
402959090064101	79-05-08	1240	730	160	.08	72	77	.05	<500	10
	79-06-19	1190	970	150	.08	74	80	.18	<500	<5
	79-07-31	1270	1100	140	.09	69	73	.10	<500	<5
	79-08-28	1170	980	140	.11	56	58	.09	<500	<5
403001090062101	79-05-09	580	1100	59	.06	2.0	1.9	.02	<500	10
	79-06-20	540	1500	60	.06	1.6	2.3	.05	<500	<5
	79-08-01	540	1400	52	.05	1.8	2.4	<.01	<500	<5
	79-08-29	500	1200	61	.03	1.7	2.1	.01	<500	<5
403001090062102	79-05-09	930	1400	92	.06	1.2	1.1	.03	<500	10
	79-06-20	970	1300	90	.05	.90	1.8	.23	<500	10
	79-08-01	920	1500	77	.06	.90	1.3	<.01	<500	<5
	79-08-29	970	1200	94	.05	.70	1.2	.01	<500	<5
403001090062103	79-05-09	950	890	71	.07	.90	1.0	.02	<500	10
	79-06-20	990	1300	69	.08	.50	1.2	.07	<500	<5
	79-08-01	980	1200	59	.09	.60	.90	.01	<500	<5
	79-08-29	1040	1200	78	.05	.50	.80	.01	<500	<5
403007090063501	79-05-09	530	800	27	.06	1.1	1.2	.02	<500	10
	79-06-20	450	1300	24	.20	.80	1.2	.21	<500	<5
	79-08-01	460	1300	21	.04	.90	1.2	<.01	<500	<5
	79-08-29	430	940	26	.01	.90	1.0	.01	<500	<5
403007090063502	79-05-09	870	710	33	.05	.60	.70	.03	<500	<5
	79-06-20	860	770	39	.10	1.2	1.7	.28	<500	<5
	79-08-01	360	840	36	.05	1.3	1.8	<.01	<500	<5
	79-08-29	840	850	45	.04	1.2	1.5	.05	<500	<5
403007090063503	79-05-09	710	440	10	.07	2.3	2.3	.10	<500	10
	79-06-20	710	1700	9.0	.07	1.6	2.5	.16	<500	<5
	79-08-01	680	750	8.0	.08	1.2	1.9	.05	<500	<5
	79-08-29	770	530	11	.03	.80	1.0	.01	<500	<5
403017090063201	79-05-09	1120	1400	31	.09	2.8	2.8	.03	<500	10
	79-06-20	1140	1600	33	.08	2.3	3.2	.09	<500	10
	79-07-31	1230	1400	29	.07	2.3	2.3	.01	<500	10
	79-08-29	1180	320	36	.04	2.2	2.4	.01	<500	<5
403024090064801	79-05-09	690	1000	24	.08	3.6	5.1	.10	<500	10
	79-06-19	820	1300	27	.07	3.6	17	.65	<500	<5
	79-07-31	1100	1400	30	.09	3.3	3.9	.22	1000	30
	79-08-28	850	1100	29	.06	2.6	3.0	.09	<500	<5
403029090063701	79-05-09	1020	1500	34	.22	3.4	3.3	.04	<500	10
	79-06-19	1140	1800	38	.60	2.7	3.6	.10	<500	<5
	79-07-31	890	1600	20	.10	2.8	2.8	.02	<500	10
	79-08-28	1120	1800	39	.05	2.5	2.9	.03	<500	<5

FULTON COUNTY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

STATION NUMBER	DATE OF SAMPLE	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
402950090061101	79-05-08	<15	<5	2300	<5	1500	.0	100	<150	100
	79-06-19	<15	<5	2000	140	1300	.0	<50	<150	<50
	79-07-31	<15	<5	2100	120	1200	.0	400	<150	<50
	79-08-28	<15	10	1800	<5	1200	.0	<50	<150	100
402954090060101	79-05-08	<15	20	4800	<5	3700	.0	100	<150	<50
	79-06-19	30	50	6700	120	2500	.0	200	<150	<50
	79-07-31	<15	<5	6000	100	2100	.2	100	<150	400
	79-08-28	<15	20	5800	<5	2100	.0	<50	<150	100
402954090060102	79-05-08	<15	20	1900	<5	3800	.1	100	<150	<50
	79-06-19	<15	<5	3700	120	3900	.4	100	<15	<50
	79-07-31	<15	<5	3400	<5	3500	.0	<50	<15	100
	79-08-28	<15	10	3600	100	3500	.0	<50	<15	100
402959090064101	79-05-08	<15	<5	4100	<5	740	.0	<50	<150	100
	79-06-19	<15	<5	6100	190	770	.0	<50	<150	<50
	79-07-31	<15	<5	6000	50	720	.1	200	<150	<50
	79-08-28	<15	10	5200	<5	750	.0	<50	<150	100
403001090062101	79-05-09	<15	<5	3800	<5	100	.0	100	<150	<50
	79-06-20	20	20	2100	10	110	.0	400	<150	<50
	79-08-01	<15	20	1100	<5	160	.0	200	<150	<50
	79-08-29	<15	<5	2600	<5	190	.4	<50	<150	<50
403001090062102	79-05-09	<15	<5	3800	<5	4500	.0	100	<150	<50
	79-06-20	20	10	500	10	5200	.0	200	<150	<50
	79-08-01	<15	20	600	<5	5000	.2	200	<150	<50
	79-08-29	30	10	400	100	4900	.3	100	<150	<50
403001090062103	79-05-09	<15	<5	3500	<5	4500	.0	<50	<150	<50
	79-06-20	<15	<5	300	60	5200	.0	200	<150	<50
	79-08-01	<15	30	500	<5	5200	.2	100	<150	<50
	79-08-29	20	10	400	100	5100	.0	<50	<150	<50
403007090063501	79-05-09	<15	<5	900	<5	120	.0	100	<150	<50
	79-06-20	<15	<5	<50	210	70	.0	<50	<150	<50
	79-08-01	<15	10	100	110	70	.0	<50	<150	<50
	79-08-29	<15	30	<50	100	70	.0	<50	<150	<50
403007090063502	79-05-09	<15	<5	2200	<5	3600	.0	100	<150	100
	79-06-20	<15	<5	1100	220	1700	.0	<50	<150	<50
	79-08-01	<15	10	1800	110	1600	.0	100	<150	<50
	79-08-29	<15	10	2300	<5	1500	.0	<50	<150	<50
403007090063503	79-05-09	<15	<5	3900	<5	5100	.0	100	<150	<50
	79-06-20	30	<5	430	320	5600	.0	<50	<150	<50
	79-08-01	<15	10	1600	<5	5500	.0	<50	<150	<50
	79-08-29	<5	<5	400	<5	5500	.0	<50	<150	<50
403017090063201	79-05-09	<15	10	400	<5	960	.0	<50	<150	100
	79-06-20	20	<5	200	280	1000	.0	<50	<150	<50
	79-07-31	<15	10	500	<5	930	.3	10	<150	<50
	79-08-29	<15	10	200	100	920	.2	100	<150	<50
403024090064801	79-05-09	<15	10	2700	<5	1400	.0	<50	<150	100
	79-06-19	<15	<5	400	270	1700	.0	<50	<150	<50
	79-07-31	40	<5	1000	<5	1800	.0	20	<150	400
	79-08-28	<15	<5	500	100	1900	.0	<50	<150	<50
403029090063701	79-05-09	<15	10	3800	<5	920	.0	100	<150	<50
	79-06-19	20	<5	5000	150	930	.0	<50	<150	<50
	79-07-31	<15	20	5100	30	880	.0	200	<150	<50
	79-08-28	<15	10	4300	<5	880	.0	<50	<150	<50

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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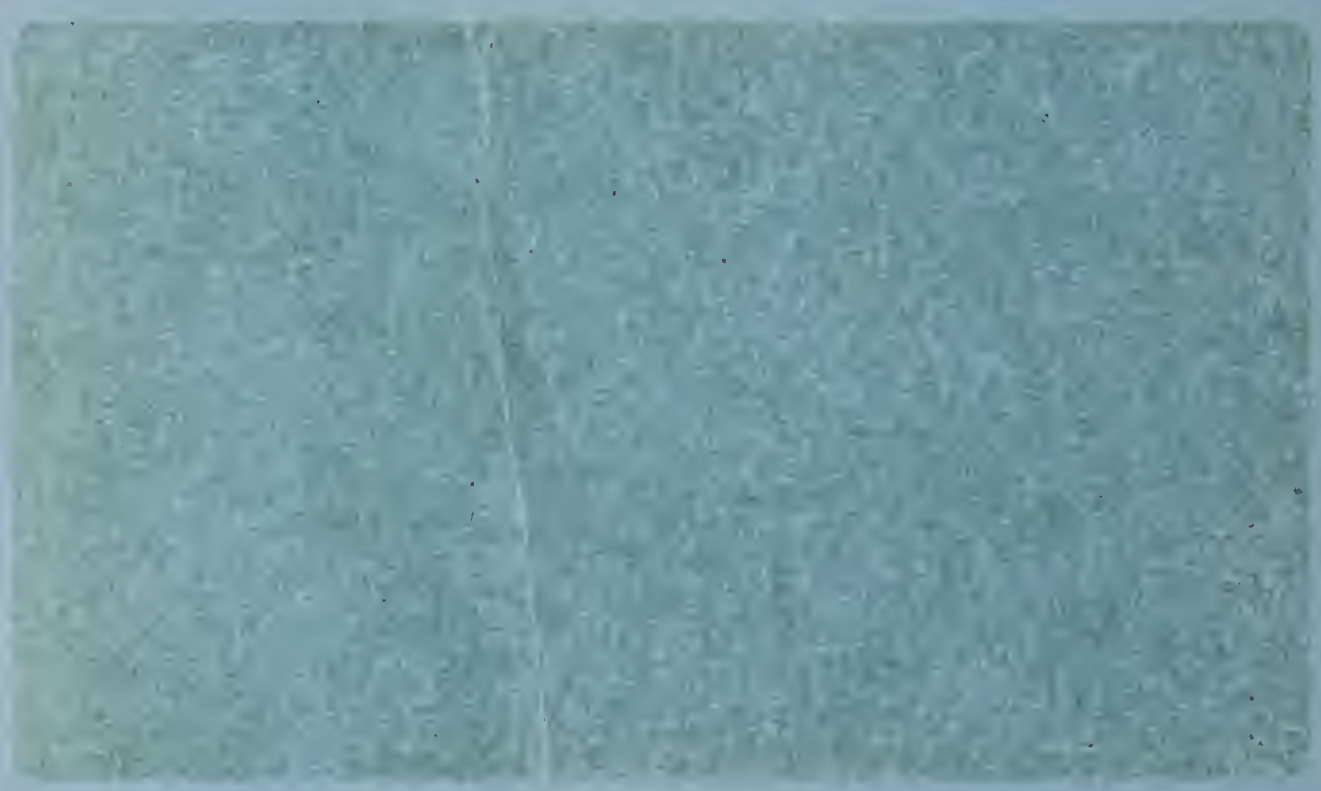
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